ORDER NO. AD9703053C8

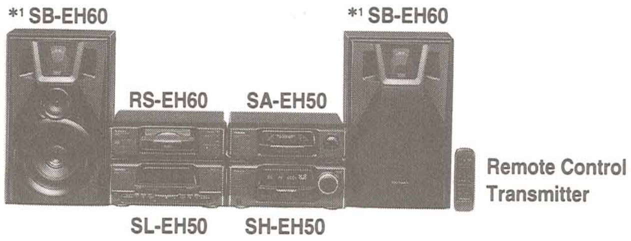
Service Manual

Tuner/Amplifier
SA-EH50

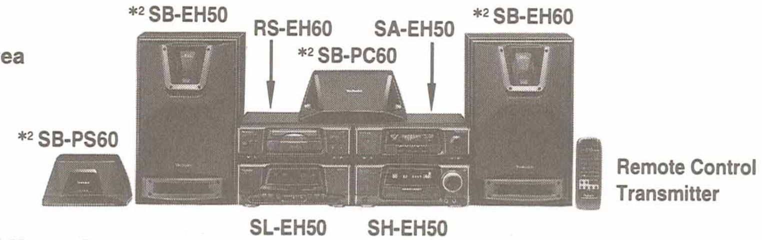
System: SC-EH50

Tuner/Amplifier

For
(E)/(EP), (EB) and
(EG) areas



For
(GC) area



Colour

(K) .... Black

Area

(E)/(EP) ... Europe, Russia.
(EB) .... Great Britain.
(EG)......... Germany and Itary.
(GC) .... Asia, Latin America,
Middle East and Africa.

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Specifications

Amplifier Section

Power output :	
DIN 1 kHz, THD 1%, both channels driven	
For (E),(EB),(EG) and (EP) areas ;	2 × 50 W(6 ohm)
For (GC) area ;	2 × 35 W(6 ohm)
RMS 1 kHz, THD 10%, both channels driven	
For (E),(EB),(EG) and (EP) areas ;	2 × 70 W(6 ohm)
For (GC) area ;	2 × 50 W(6 ohm)

(GC) area only

PRO LOGIC mode :	
DIN 1 kHz, THD 1%	
MAIN (both channels driven) ;	2 × 30W(6 ohm)
CENTER ;	30 W(8 ohm)
SURROUND ;	30W(4 ohm + 4 ohm)
RMS 1 kHz, THD 10%	
MAIN (both channels driven) ;	2 × 40 W(6 ohm)
CENTER ;	40 W(8 ohm)
SURROUND ;	40 W(4 ohm + 4 ohm)
PMPO 1 kHz ;	1400 W (MAIN 6 ohm, CENT. 8 ohm, SURR. 4 ohm + 4 ohm)

Total harmonic distortion :	
Rated power at 1 kHz ;	1 %(6 ohm)
Half power at 1 kHz ;	0.09 %(6 ohm)
Load impedance :	
MAIN ;	6 ohm – 8 ohm
CENTER ;	8 ohm
SURROUND ;	4 ohm – 8 ohm)
S/N (rated power) :	
MAIN ;	80 dB
Frequency response ;	50 Hz–30 kHz (–3 dB)
Input sensitivity/impedance :	
EXTERNAL, AUX ;	250 mV/15 kohm
Output level :	
EXTERNAL RECOUT ;	250 mV/1.5 kohm
V.BASS mode :	
Center frequency ;	60 Hz
LEVEL (VOL –30 dB) ;	+8 dB

FM tuner section

Frequency range :	87.50–108.00 MHz (0.05 MHz steps)
Sensitivity :	1.8 μV (IHF usable)
S/N 26 dB ;	1.5 μV
S/N :	
MONO ;	70 dB (75 dB, IHF)
Stereo separation at 1 KHz ;	35 dB
Antenna terminal(s) ;	75 ohm (unbalanced)

AM tuner section

Frequency range :	522–1611 kHz (9 kHz steps) 530–1620 kHz (10 kHz steps)
Sensitivity (S/N 20 dB) :	500 μV/m

Timer section

Clock :	Quartz-lock type
Function :	Play timer (1 time dayly), REC timer (1 time dayly), Sleep (120 min., 30 min. intervals)
Setting :	1 minute–23 hours 59 minutes (1 min intervals)

General

Power consumption :	120 W
Power supply :	
For (E),(EG),(EP) areas ;	AC 220 V, 50/60 Hz
For (EB),(GN) areas ;	AC 230–240 V, 50 Hz
For (GC) area ;	AC 110/127/220/230–240 V, 50/60 Hz
Dimensions :	287(W)/118.5(H)/343.5(D) mm
Weight :	4.4 kg

Note: Specifications are subject to change without notice.
Weight and dimensions are approximate.

System/SC-EH50:

For (E),(EB),(EG) and (EP) areas
Sound processor: SH-EH50, Tuner/Amplifier: SA-EH50, Compact disc player: SL-EH50, Cassette deck: RS-EH60,
Front speakers: *1 SB-EH60

For (GC) area
Sound processor: SH-EH50, Tuner/Amplifier: SA-EH50, Compact disc player: SL-EH50, Cassette deck: RS-EH60,
Front speakers: *2 SB-EH50, Center speaker: *2 SB-PC60, Surround speakers: *2 SB-PS60

Note: *1 ...Made in PAES, *2...Made in MESA

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

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■ Before Repair

(1) Turn off the power supply. Using a 10 Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C703 and C702, C704) in order to discharge the voltage.

(2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50/60 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 110V/ 230V/ 240V.

Area	(E) (EG) (EP)	(EB)	(GC)	
Power supply voltage	AC 230 V	AC 240 V	AC 110 V	AC 240 V
Consumed current 50 Hz	70 ~ 250 mA	70 ~ 250 mA	240 ~ 600 mA	70 ~ 250 mA

■ Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

* No sound is heard when the power is switched ON.
* Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

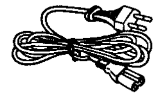
If this occurs, follow the procedure outlined below:

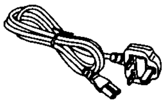
1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

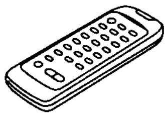
■ Accessories

- **AC power supply cord**
For (E)/(EP),(EG) and (GC) areas: (RJA0019-X) .... 1 pc.
For (EB) area: (RJA0053-1X) .... 1 pc.


For (E)/(EP),(EG) and (GC) areas

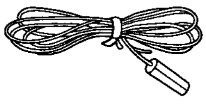

For (EB) area

- **Remote control transmitter**
For (E)/(EP),(EB) and (EG) areas: (RAK-CH426WH) ... 1 pc.
For (GC) area: (RAK-CH220WH) .... 1 pc.



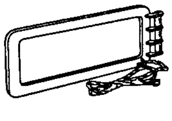
- **Speaker cords**
(REE0499) .... 2 pc.

- **FM indoor antenna**
For (E)/(EP),(EB) and (EG)areas: (RSA0007) .. 1 pc.
For (GC) area: (RSA0006) .... 1 pc.


For (E),(EG),(EG) and (EP) areas

For (GC) area

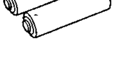
- **AM loop antenna**
(RSA0012) .... 1 pc.



- **Antenna holder**
(RMN0244) .... 1 pc.

- **Mounting screw**
(XTN3+12AFZ) .... 1 pc.

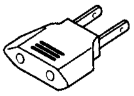
- **Batteries**
(UM-4, "AAA", R03) .... 2 pc.
Note: These are available on sales route.



- **Antenna plug adaptor**
(SJP9009) .... 1 pc.

(EB) area only

- **AC plug adaptor**
(SJP5213-1) .... 1 pc.


(GC area only

■ Caution for AC Main Lead

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFETY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF–KEEP DRY.

Before use

Removal the connector cover.

How to replace the fuse

The location of the fuse differ accrding to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

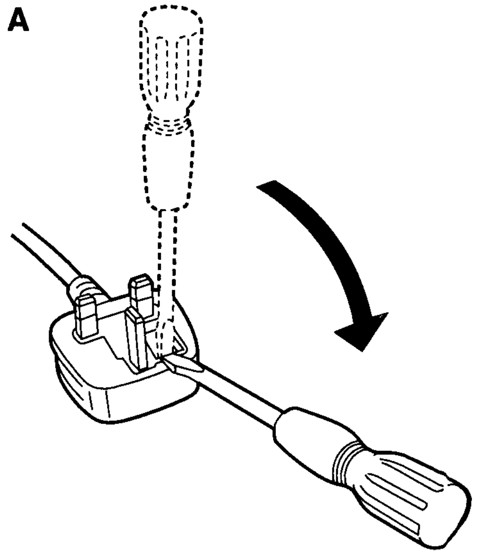
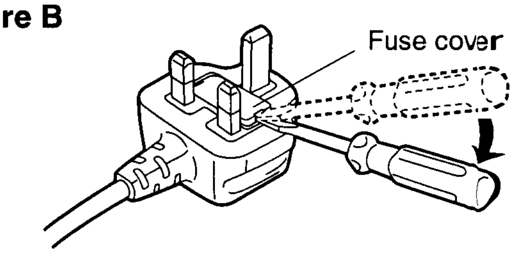


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

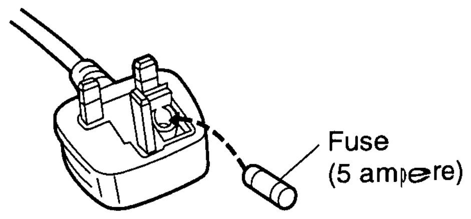
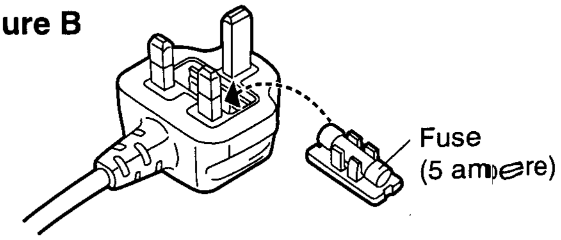


Figure B



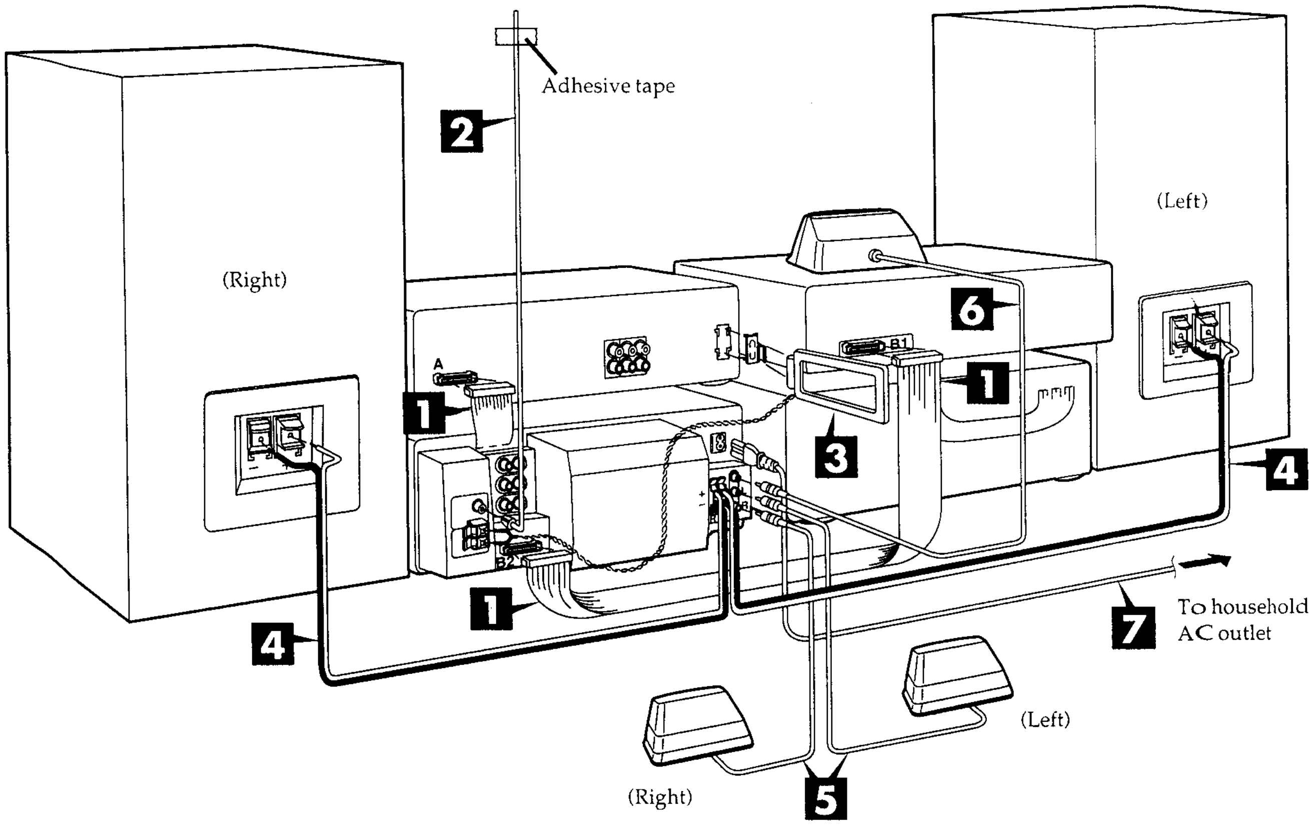
■ Connections

Connect the AC mains lead after you have connected all other cables.

(GC) area only

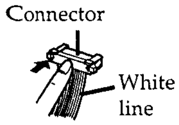
The configuration of the FM antenna terminal is different.

To prepare the AM loop antenna wire and speaker cords, twist the vinyl cover tip and pull off.


Adhesive tape
2
(Right)
(Left)
6
A
B1
1
1
3
4
B2
1
4
7
To household AC outlet
(Left)
(Right)
5

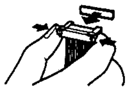
1

To connect cables


Connector
White line

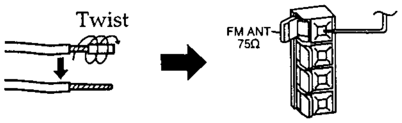
To unplug cables

Hold the connector from both ends and pull it out.

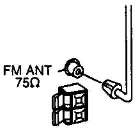


2

For (GC) area only

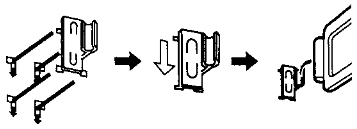

Twist
FM ANT 75Ω

(For others)

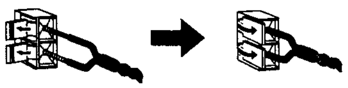


3

1

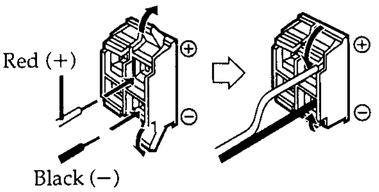


2

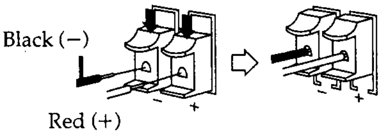


4

Tuner/amplifier side



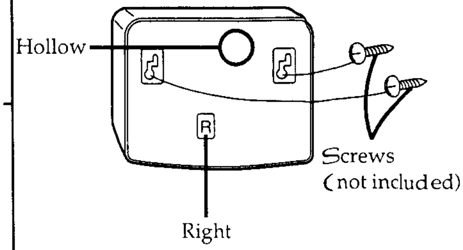
Speaker side



5

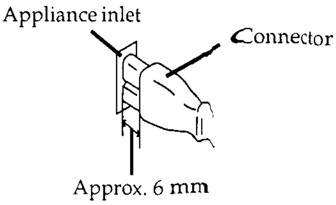
For (GC) area only

Bottom of the surround speaker


Hollow
R
Right
Screws (not included)

7

(Insertion of Connector)


Appliance inlet
Connector
Approx. 6 mm

1 Connect the flat cables.

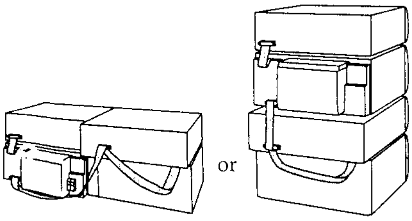
1. Connect the shorter flat cable from the tuner/amplifier to terminal A on the sound processor.
2. Connect the longer flat cable from the cassette deck to terminals B1 and B2.

Note

Do not try connecting or disconnecting the flat cables while the power is switched to ON.

After connection:

Keep cables as flat against the back of the unit as possible.



2 Connect the FM indoor antenna.

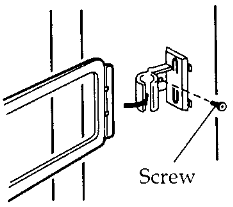
Tape the antenna to a wall or column, in a position where radio signals are received with the least amount of interference.

Note

When you cannot get good reception with this FM indoor antenna, we recommend you install an FM outdoor antenna (not included).

3 Connect the AM loop antenna.

- **To install on the rear panel of the sound processor.**
  1. Attach the antenna holder to the rear panel of the sound processor.
     Then clamp the antenna into the antenna holder.
  2. Connect the antenna terminal to the rear panel of the tuner/amplifier.
- **To install on walls or pillars.**



Note

To minimize noise pickup, bundle the loop antenna cord using tape or the like to keep the flat cables away from the AM loop antenna cord.

4 Connect the right (R) and left (L) front speaker cables.

Note

- To prevent damage to circuitry, never short-circuit positive (+) and negative (−) speaker wires.
- Be sure to connect only positive (red) wires to positive (+) terminals and negative (black) wires to negative (−) terminals.
- Left and right front speakers are exactly the same.

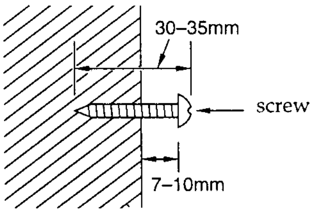
5 **For (GC) area only**
Connect the surround speaker cables.

Note

- Connect the surround speakers after checking their bottom panels to see which one is for the left channel and which one is for the right channel.
- When the speakers are to be mounted on a wall, select screws which are suited for the type of wall concerned.
- It is recommended that the speaker cords be fitted into the hollows provided on the bottom panels of the surround speakers.

Speaker attachment to wall

Screw the wood screw into a thick and hard part of the wall, leaving 7–10 mm of the screw projecting from the wall surface. (The wall or pillar on which the speaker systems are to be attached should be capable of supporting a weight of 5 kilograms.)



wall or pillar

6 **For (GC) area only**
Connect the center speaker cables.

Note for front/center speakers

These speakers are made so as to be able to be used in close proximity to the TV, but irregular coloring may result due to how the system is placed. If such distortion occurs, turn off the TV for sometime between 15 and 30 minutes. The demagnetizing function of the TV will eliminate the distortion. If the irregular coloring is still visible, then move the speaker further away from the TV.
Please note that if there is a magnetic object near the TV, irregular coloring may result due to the interaction between the TV and the speakers.

7 Connect the AC mains lead.

(United Kingdom only)
BE SURE TO READ THE CAUTION FOR AC MAINS LEAD ON PAGE 3 BEFORE PROCEEDING TO STEP 7.

Insertion of Connector

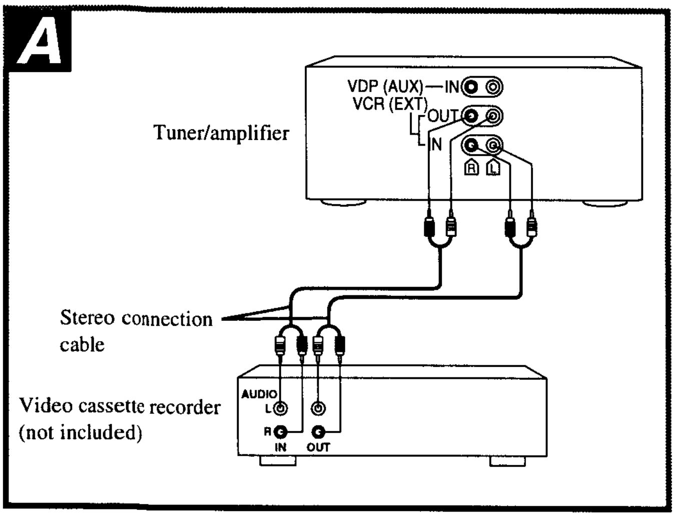
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.
However there is no problem using the unit.

External unit connections

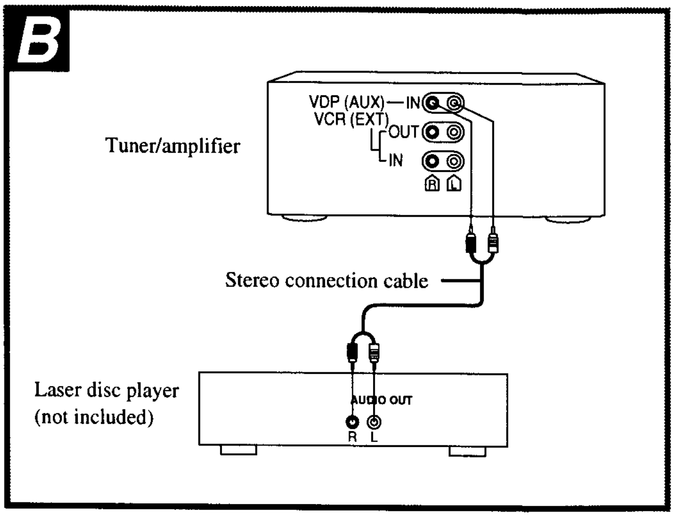
- Make sure that the power supply for all components has been turned off before making any connections.
- For details, refer to the operating instructions of the units which are to be connected.
- All peripheral components and cables sold separately.

Stereo connection cable
White (L)
Red (R)

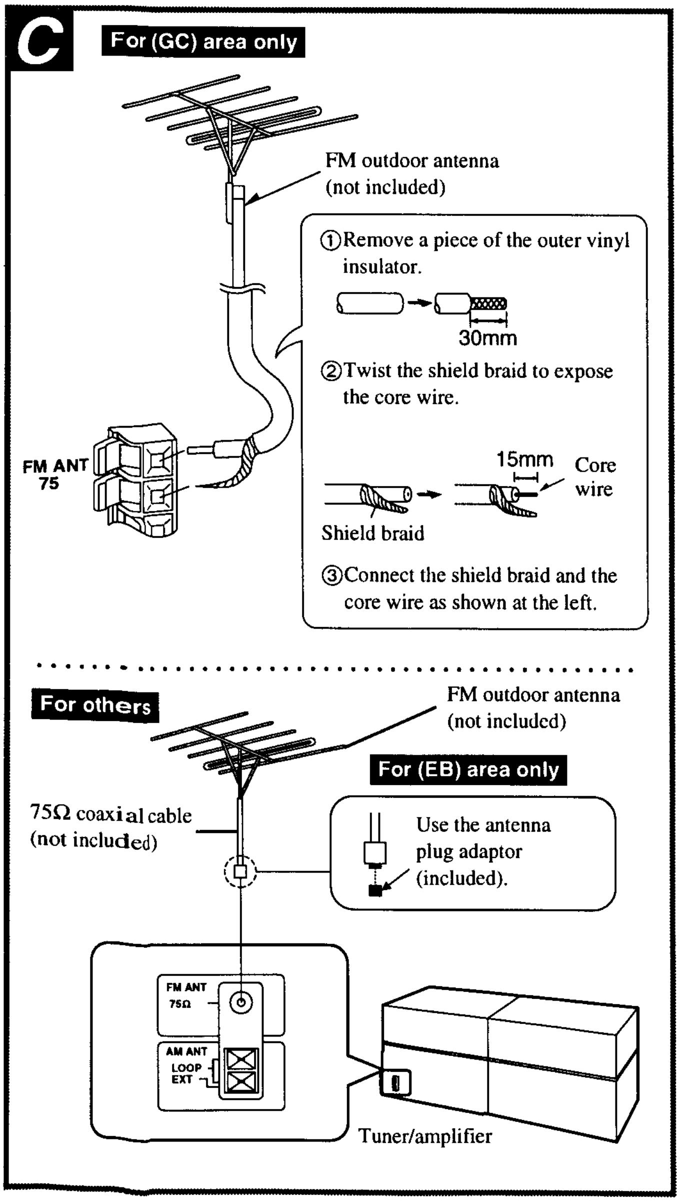
A Video Cassette recorder
B Laser disc player



A
Tuner/amplifier
VDP (AUX)—IN
VCR (EXT)
OUT
IN
R L
Stereo connection cable
Video cassette recorder
(not included)
AUDIO
L
R
IN
OUT



B
Tuner/amplifier
VDP (AUX)—IN
VCR (EXT)
OUT
IN
R L
Stereo connection cable
Laser disc player
(not included)
AUDIO OUT
R L



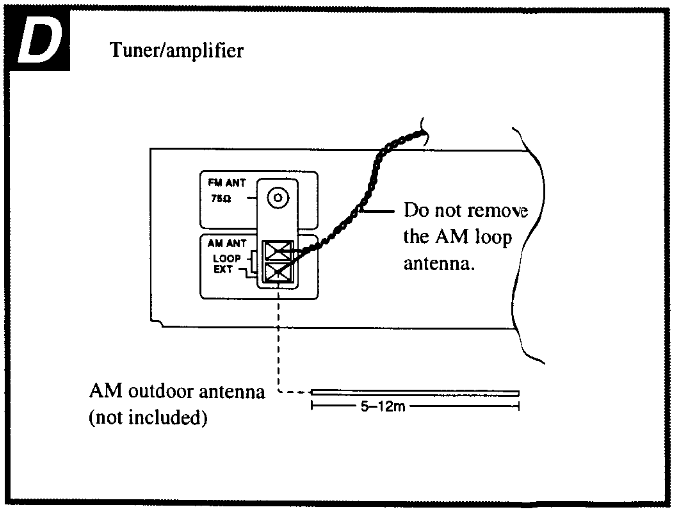
C
For (GC) area only
FM outdoor antenna
(not included)
30mm
15mm
Core wire
Shield braid
FM ANT
75
For others
FM outdoor antenna
(not included)
For (EB) area only
75Ω coaxial cable
(not included)
FM ANT
75Ω
AM ANT
LOOP
EXT
Tuner/amplifier

①Remove a piece of the outer vinyl insulator.

②Twist the shield braid to expose the core wire.

③Connect the shield braid and the core wire as shown at the left.

Use the antenna plug adaptor (included).



D
Tuner/amplifier
FM ANT
75Ω
AM ANT
LOOP
EXT
Do not remove the AM loop antenna.
AM outdoor antenna
(not included)
5–12m

Optional antenna connections

You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc.

FM outdoor antenna (not included) C

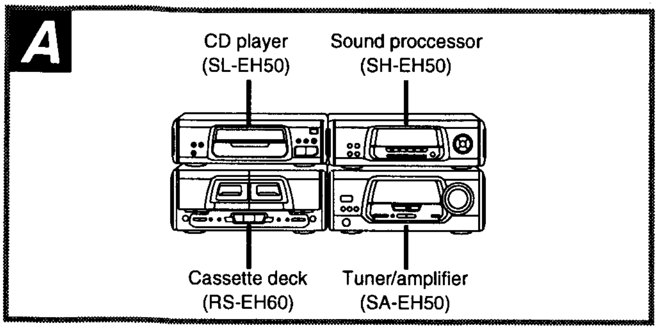
Note
An outdoor antenna should be installed by a qualified technician only.

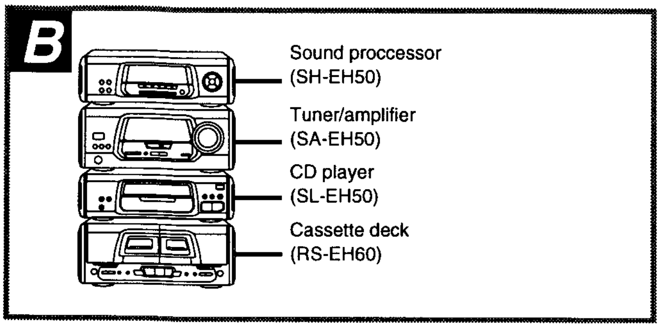
AM outdoor antenna (not included) D

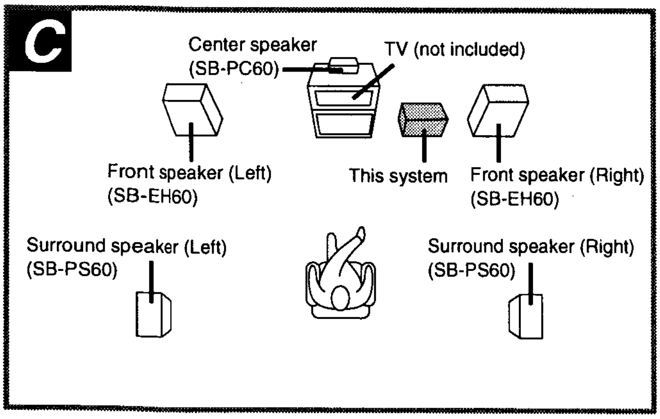
Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

Note
When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

Installation


A
CD player
(SL-EH50)
Sound proccessor
(SH-EH50)
Cassette deck
(RS-EH60)
Tuner/amplifier
(SA-EH50)


B
Sound proccessor
(SH-EH50)
Tuner/amplifier
(SA-EH50)
CD player
(SL-EH50)
Cassette deck
(RS-EH60)


C
Center speaker
(SB-PC60)
TV (not included)
Front speaker (Left)
(SB-EH60)
This system
Front speaker (Right)
(SB-EH60)
Surround speaker (Left)
(SB-PS60)
Surround speaker (Right)
(SB-PS60)

Locating the components

Side-by-side set-up A
Stacking B

Placement of speakers C

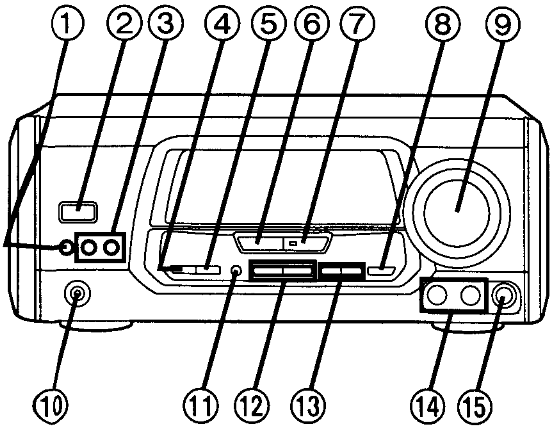
(GC) area only

As well as enjoying normal stereo reproduction with the left and right front speakers, a center speaker and surround speakers can also be connected to the unit in order to enjoy the sound performance of DOLBY PRO LOGIC Systems.

We recommend that surround speakers be placed on the side of or slightly behind the listener, and about one meter higher than ear level.
However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.

Caution
Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speaker, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.

Location of Controls

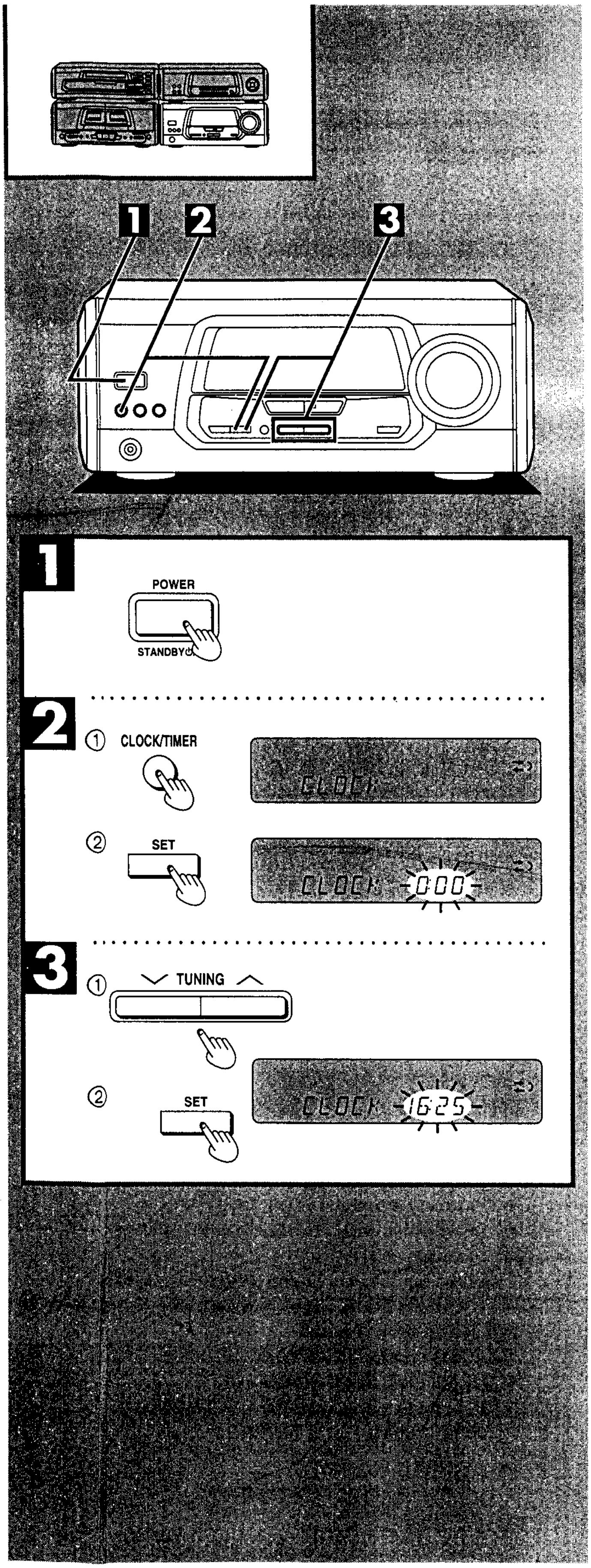

①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮

① Clock/timer button (CLOCK/TIMER)
② Power "STANDBY ⏻ /ON" switch
(POWER, STANDBY ⏻ /ON)
③ Timer on/off buttons (◴ PLAY, ◴ REC)
④ Tuning mode select button (TUNING MODE)
⑤ Set button (SET)
⑥ Source input select button (INPUT SELECTOR)
⑦ Tuner/band select button and indicator (TUNER/BAND)
⑧ V.bass button (V.BASS)
⑨ Volume control (VOLUME)
⑩ Headphones jack (PHONES)
⑪ FM mode select button (FM AUTO/MONO)
⑫ Tuning buttons (∨,∧ ,TUNING)

For (EG) and (EP) areas
⑬ RDS display mode select buttons

For (GC) area
⑬ KARAOKE and Echo buttons)KARAOKE, ECHO)
⑭ Microphone jacks (MIC, 1, 2)
⑮ Microphone volume control (MIC VOL)

■ Setting the Time



The tuner/amplifier displays the time, frequency and other information on CDs and tapes.

This is a 24-hour display clock.

These instructions explain how to set the timer for 16:25.

1 Switch on the power.

2 ① Press CLOCK/TIMER to show "CLOCK".

Every time you press the button, the indication changes in the order of CLOCK→⊙ PLAY→⊙ REC→Original display.

Within 5 seconds:

② Press SET.

3 ① Press TUNING (∨ or ∧) to set the present time on the display.

The time display can be changed in one minute units by tapping the buttons, and quickly by holding down the buttons.

② Press SET.

The display will return to the previous display after about 3 seconds.

When "--:--" appears:

It appears when you connect the AC power supply cord for the first time or if there has been a power failure.
Reset the time as explained above.

If the minutes setting is off:

1. Press CLOCK/TIMER.
2. Press SET.
3. Press TUNING (∨ or ∧) to set the minutes, and then press SET.

To display the clock again:

Press CLOCK/TIMER.
The clock display will appear for about 5 seconds.

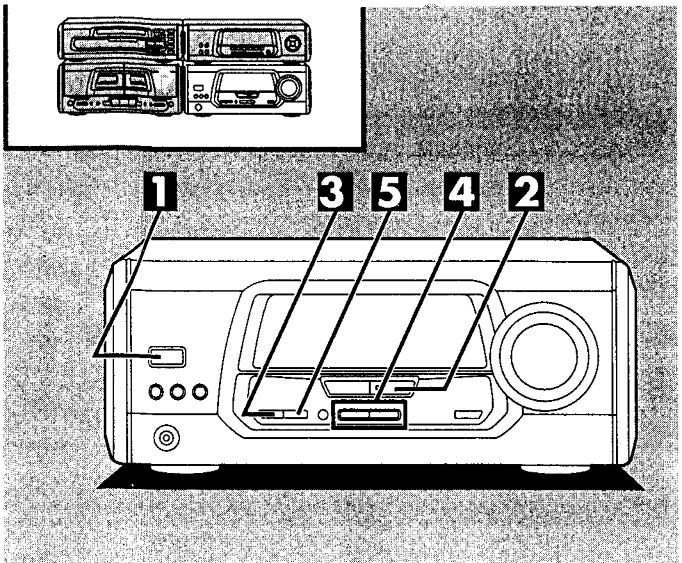
For your reference:

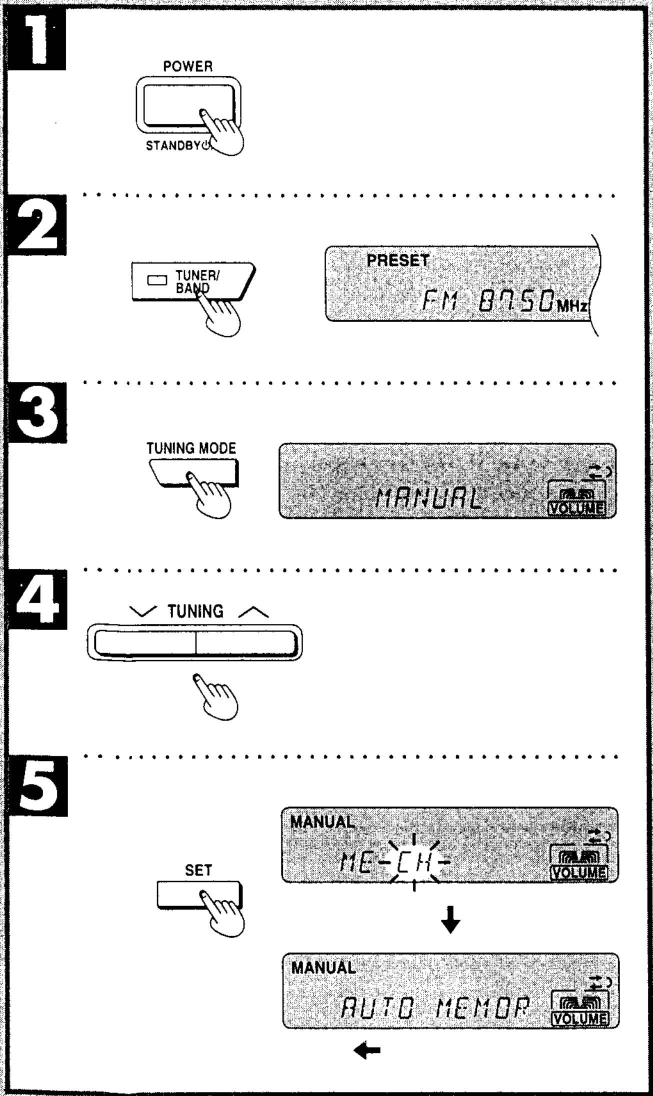
When you turn OFF the system from the POWER button, the system goes on standby.

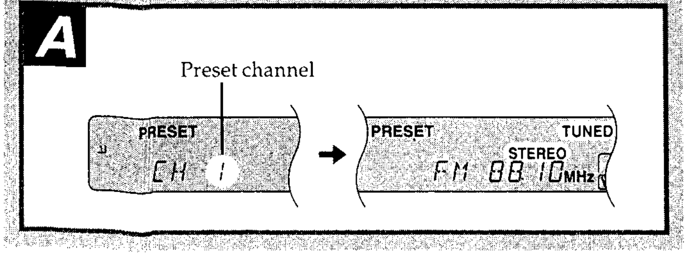
Demo function while the power is on:

When the input source is set to "CD" or "TAPE", the demo function will run automatically after about 2 minutes or more in the stop mode.
You can cancel the demo function by pressing and holding DISP MODE/-DEMO for about 2 seconds or more while the automatic demo function is activated.

■ Memory Presetting







- Once stations have been preset, you can easily select them from the tuner/amplifier or the remote control.
- You can preset a total of 39 stations between the FM and AM bands.
- Stations can be set automatically or manually.

Automatic memory presetting

The frequencies are automatically preset (in sequence from lower to higher frequencies) into the memory: "channels" 1 to 39 are available for the presetting of FM stations and "channels" 21 to 39 are available for AM stations.

This example in the figure shows how to preset FM stations.

1 Switch on the power.

2 Press TUNER/BAND to select the desired band.
Each time you press this button, "FM" and "AM" will appear alternately.

3 Press TUNING MODE to select "MANUAL".
Each time you press this button, "MANUAL" and "PRESET" will appear alternately.

4 Press and hold TUNING (∨ or ∧) until the display shows the frequency from which you want to begin automatic memory presetting.
Press TUNING (∨ or ∧) momentarily to stop scrolling when the displayed frequency approaches the desired frequency. Tap TUNING (∨ or ∧) a few times until the desired frequency is reached.

5 Hold down SET.
Release your finger when the words "AUTO MEMORY" scroll across the display.

The "ME" in the display will then flash while the tuner/amplifier is storing the received frequency in memory. When storing is complete, "SET OK" will be displayed.

To confirm the preset stations: A

1. Press TUNING MODE to select "PRESET".
2. Press TUNING (∨ or ∧).

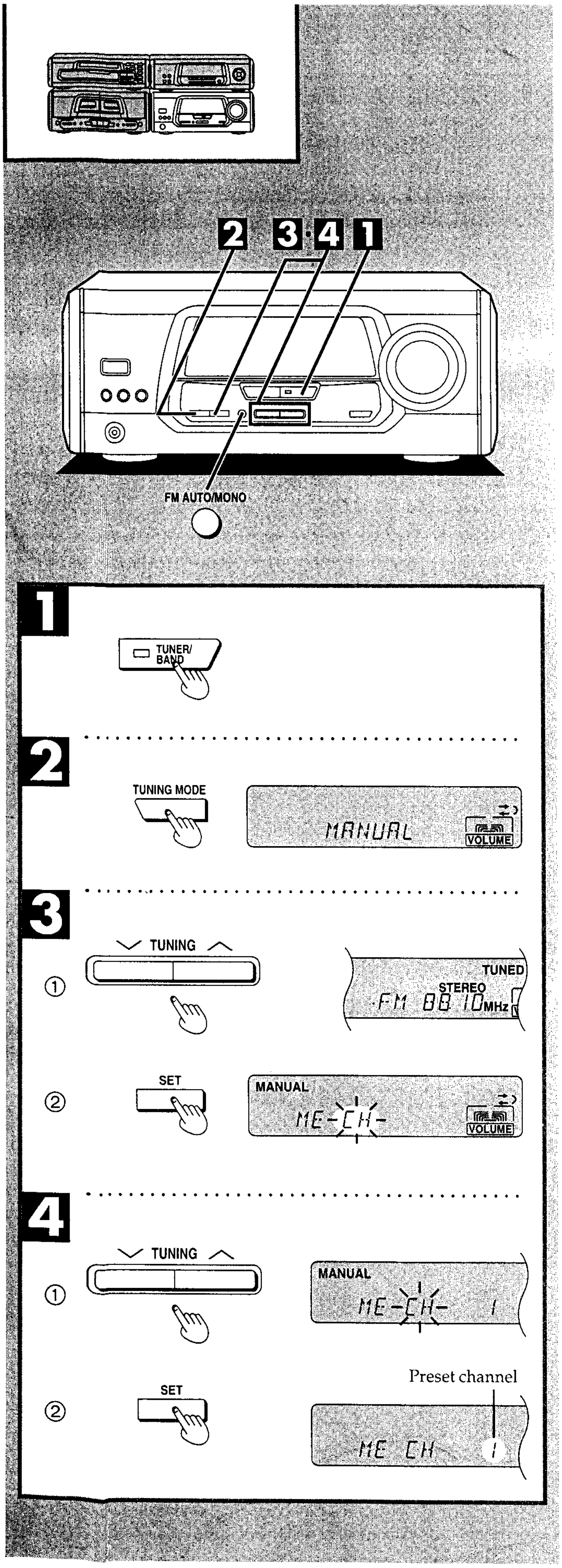
"STEREO" lights when an FM stereo broadcast is being received.
"TUNED" lights when you precisely tune in a broadcast station.

When "ERROR" appears:

Automatic memory presetting does not work when radio waves from the broadcasting station are too strong or too weak.
In such case, carry out presetting manually.

Note

When you preset a broadcast station to a channel that has already been preset, the previous presetting will be erased. So if, for example, FM frequencies are preset from channel 1 to 39 and then AM frequencies are preset, the first AM frequency will be preset to channel 21 (thus erasing the FM presetting to channel 21), the second AM frequency will be preset to 22 (erasing FM 22), and so on.


2
3·4
1
FM AUTO/MONO
1
TUNER/
BAND
2
TUNING MODE
MANUAL
VOLUME
3
TUNING
①
TUNED
STEREO
FM 88.10 MHz
②
SET
MANUAL
ME-CH-
VOLUME
4
TUNING
①
MANUAL
ME-CH- 1
②
SET
Preset channel
ME CH 1

Manual memory presetting

This example in the figure shows how to store FM 88.10 MHz into preset channel 1.

1 Press TUNER/BAND to select the desired band.

Each time you press this button, "FM" and "AM" will appear alternately.

2 Press TUNING MODE to select "MANUAL".

Each time you press this button, "MANUAL" and "PRESET" will appear alternately.

3 ① Press TUNING (∨ or ∧) to tune in the desired broadcast.

"STEREO" lights when an FM stereo broadcast is being received.

"TUNED" lights when you precisely tune in a broadcast station.

Automatic scanning:

Press and hold TUNING (∨ or ∧) until the displayed frequency starts to scroll.

- The scrolling of the displayed frequency will automatically stop if a broadcast station frequency is located during the tuning process.
- When there is excessive interference, the automatic scanning may not function.

To cancel the automatic scanning, press TUNING (∨ or ∧) once again.

② Press SET momentarily.

"CH" flashes.

4 ① Press TUNING (∨ or ∧) to select the desired preset channel

② Press SET momentarily.

"CH" lights and the display returns to the frequency after about two seconds.

To continue presetting:

Repeat steps **1** through **4**.

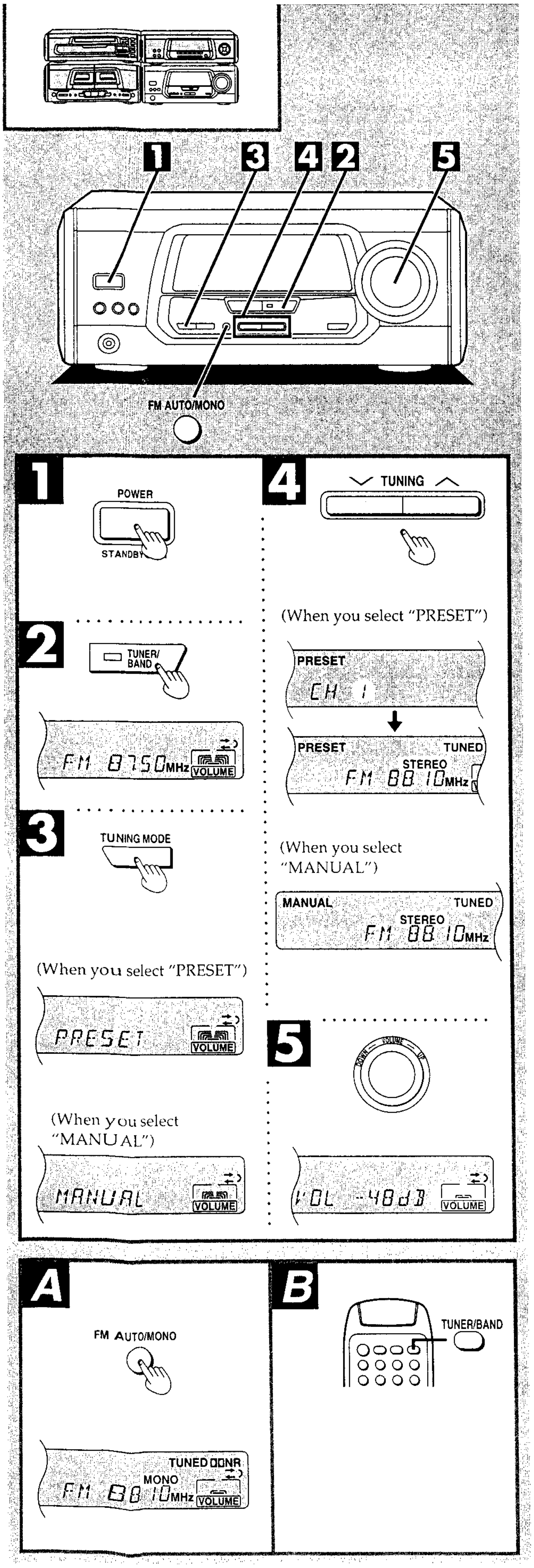
To preset FM stations in monaural position:

1. Select the desired frequency.
2. Press FM AUTO/MONO.
   "MONO" will light.
3. Follow steps **3**-② and **4** above.

For your reference:

Even if the power cord is disconnected from the household AC outlet, the memory will retain its contents for approximately 2 weeks.

■ Listening to Radio Broadcasts


1
3
4
2
5
FM AUTO/MONO
1
POWER
STANDBY
2
TUNER/BAND
FM 87.50MHz VOLUME
3
TUNING MODE
(When you select "PRESET")
PRESET VOLUME
(When you select "MANUAL")
MANUAL VOLUME
4
TUNING
(When you select "PRESET")
PRESET
CH 1
PRESET TUNED STEREO
FM 88.10MHz
(When you select "MANUAL")
MANUAL TUNED STEREO
FM 88.10MHz
5
VOLUME DOWN UP
VOL -48dB VOLUME
A
FM AUTO/MONO
TUNED MONO
FM 88.10MHz VOLUME
B
TUNER/BAND

Listening to radio broadcasts

This example in the figure shows how to tune in FM stations.

1 Switch on the power.

2 Press TUNER/BAND to select the desired band.

Each time you press this button, "FM" and "AM" will appear alternately.

3 Press TUNING MODE to select "PRESET" or "MANUAL".

Each time you press this button, "MANUAL" and "PRESET" will appear alternately.

- Select "PRESET" when stations are preset.
- Select "MANUAL" when stations are not preset.

4 Press TUNING (∨ or ∧) to tune in the desired broadcast.

"STEREO" lights when an FM stereo broadcast is being received.
"TUNED" lights when you precisely tune in a broadcast station.

Automatic scanning (when you select "MANUAL" in step 3):
Press and hold TUNING (∨ or ∧) until the displayed frequency starts to scroll.

- The scrolling of the displayed frequency will automatically stop if a broadcast station frequency is located during the tuning process.
- When there is excessive interference, the automatic scanning may not function.

To cancel the automatic scanning, press TUNING (∨ or ∧) once again.

5 Adjust the volume level as you like.

For tuning by remote control (when you select "PRESET" in step 3 above):
Specify the channel you want with the numeric buttons.

To select a two-digit channel:
Press **≥10** and then the two numbers you want within 10 seconds or so.

Note
When the FM station is preset to "MONO", the "STEREO" indicator will not light up even if a stereo broadcast is being received.

If noise is excessive in the FM stereo mode A

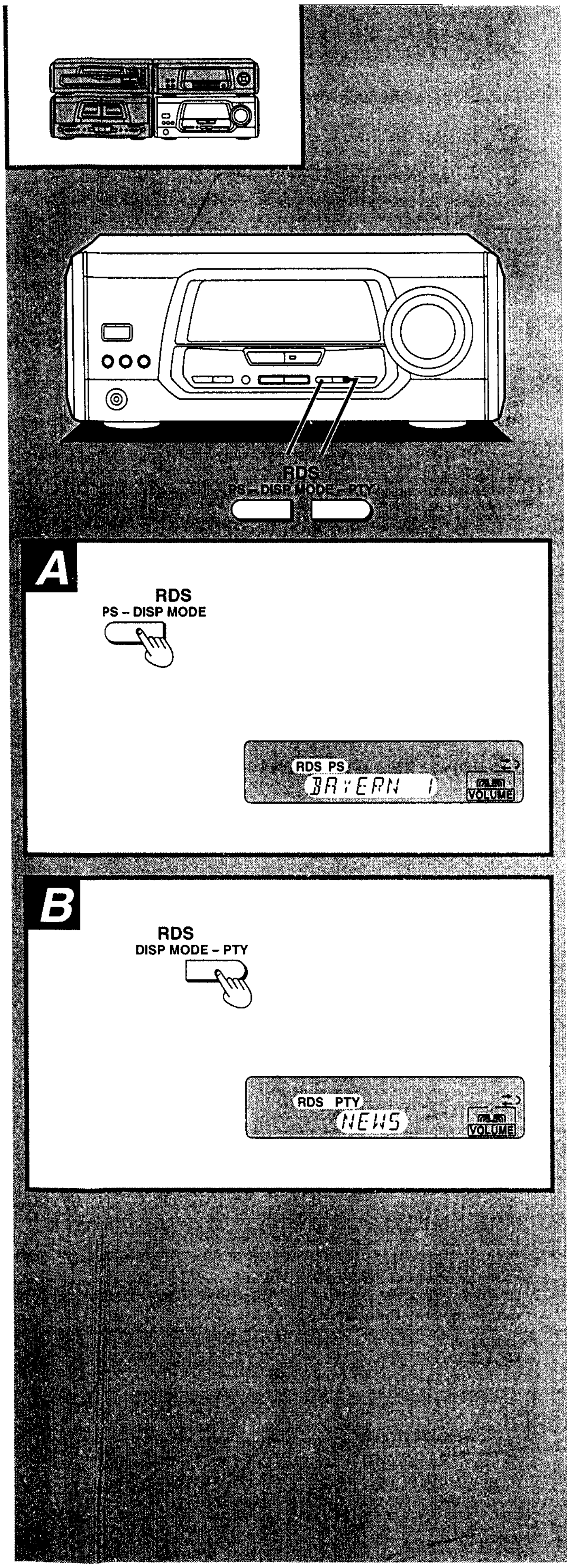
Press FM AUTO/MONO.
The sound reception mode switches to "MONO" (monaural) and "MONO" lights.
The sound will then be heard in monaural. If the broadcast signal is weak, or if there is a large amount of interference, you will get a clearer sound using MONO function.
To cancel the "MONO" mode, press the button again.

When "MONO" indicator goes off:
Use this setting for normal listening. Both stereo and monaural sounds can be heard as they are.

Note
If you change frequencies in the "MONO" mode, the "MONO" mode will be cancelled.

One-touch play B
When the system is OFF, you can receive the station last tuned in when you press TUNER/BAND on the remote control.
Play will start with volume increasing gradually.

■ Enjoying RDS Broadcasts [For (EG) and (EP) areas]



This unit lets you take advantage of the Radio Data System (RDS) in areas where RDS broadcast services are received. This advanced system provides useful information, utilizing a 57 kHz subcarrier above the audible range, in addition to the main FM signal.

Types of RDS and functions

To display the name of a broadcast station (PS display):

When this system receives a PS signal in an RDS broadcast, the name of the broadcast station is shown on the display.

To display the type of a program (PTY display):

While the PTY signal is being received, the name of the type of program currently being broadcast can be shown on the display.

Notes

- Even if an FM broadcast station is transmitting RDS signals, the functions of this system may not be able to utilize these signals if the signal quality is too poor.
- "PTY" may not be available in some areas. (Future function)

To display the name of a broadcasting station A

(When th FM station is received)

Press PS-DISP MODE.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the name of the broadcast station and "PS" indicator will be shown on the display of this system.
Each time you press the button, frequency display and PS display will appear alternately.

To display the type of a program B

(When the FM station is received)

Press DISP MODE-PTY.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the type of the program and "PTY" indicator will be shown on the display of this system.
Each time you press the button, frequency display and PTY display will appear alternately.

When "NO RDS" is displayed

If the FM broadcast being received does not provide RDS service, "NO RDS" will be displayed when the PS display mode or PTY display mode is selected.

Note

When receiving a broadcast station, in PTY mode, which does not transmit PTY, the display will not show "NO PTY" automatically.
The same also applies to "NO RDS" when RDS is not transmitted.

About the PTY display

There are a total of 15 PTY displays on this unit. The table gives an explanation of each display.

Display	Explanation
NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical program expanding or enlarging upon the news, generally in different presentation style or concept, including documentary debate, or analysis.
INFO	Program whose purpose is to impart advice in the widest sense, including meteorological reports and forecasts, consumer affairs, medical help, etc.
SPORT	Program concerned with any aspect of sport.
EDUCATE	Program intended primarily to educate.
DRAMA	All radio plays and serials.
CULTURE	Programs concerned with any aspect of national or regional culture, including religious affairs, philosophy, social science, language, theatre, etc.
SCIENCE	Programs about the natural sciences and technology.
VARIED	Used for mainly speech-based programs, usually of a light-entertainment nature not covered by above categories. Examples are: quizzes, panel games, personality interviews, comedy and satire.
POP M	Commercial music which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
M.O.R.M	(Middle of the Road Music). Common term to describe music considered to be "easy-listening", as opposed to Pop, Rock or Classical. Music in this category is often, but not always, vocal, and usually of short duration (<5 min.).
LIGHT M	Classical Musical for general, rather than specialist, appreciation. Examples of music in this category are instrumental music and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the above categories. Particularly used for specialist music, of which Jazz, Rhythm & Blues, Folk, Country, and Reggae ar examples.

Operation Checks and Main Component Replacement Procedures

NOTE

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.

2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

3. Select items from the following index when checks or replacement are required.

4. Refer the parts No. on the page of "Main Component Replacement Procedures", if necessary.

• Contents

• Checking procedures for eack P.C.B. Page.

1. Checking for the tuner P.C.B. and power supply P.C.B.. •••••••• 14.
2. Checking for the operation P.C.B.. •••••••• 15.
3. Checking for the main P.C.B.. •••••••• 15,16.

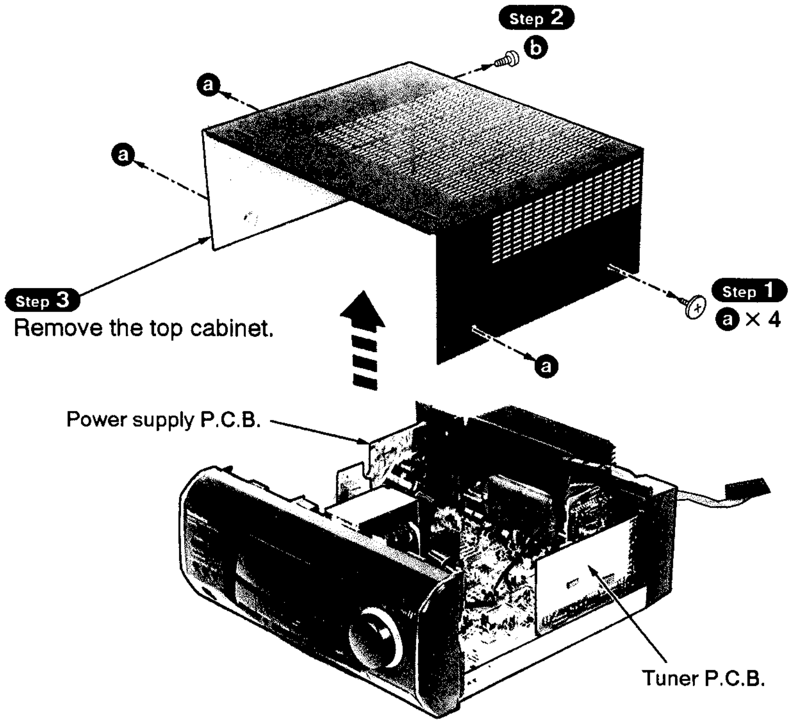
• Main Component Replacement Procedures

1. Replacement for the power IC and regulator transistor. •••••••• 17.

Checking procedures for eack P.C.B.

1. Checking for the tuner P.C.B. and power supply P.C.B.

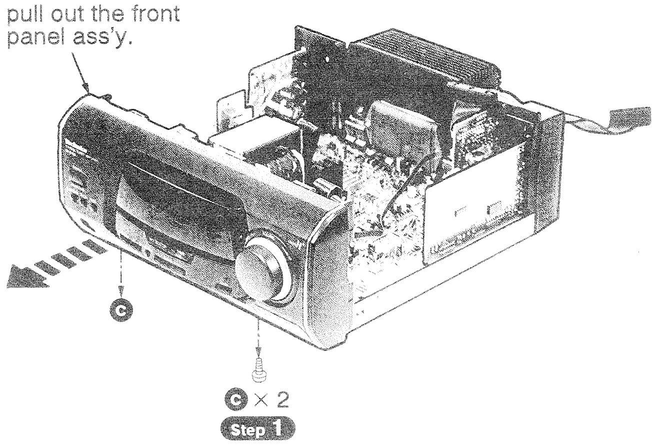
• Check the tuner P.C.B. and power supply P.C.B. as shown below.



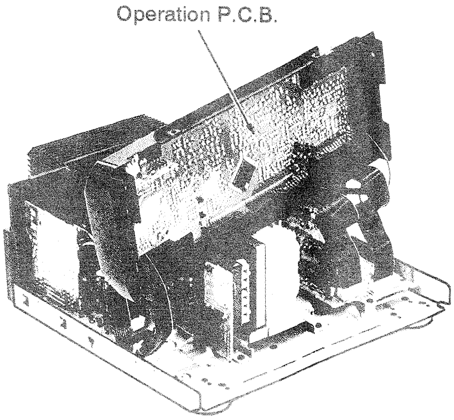
2. Checking for the operation P.C.B.

- Follow the **Step 1** ~ **Step 3** of the item 1 in checking procedure for each P.C.B. on page 14.

Step 2
pull out the front
panel ass'y.

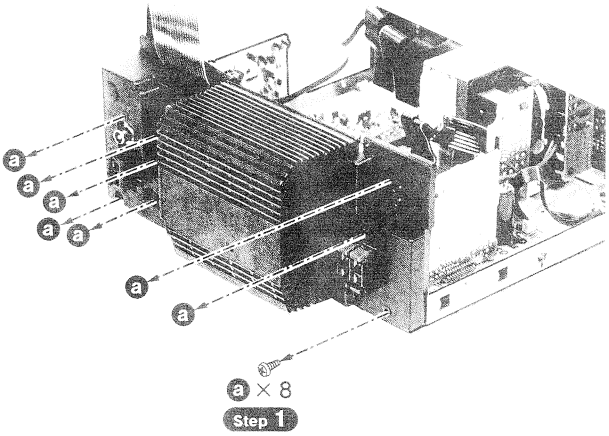


- **Check the operation P.C.B. as shown below.**

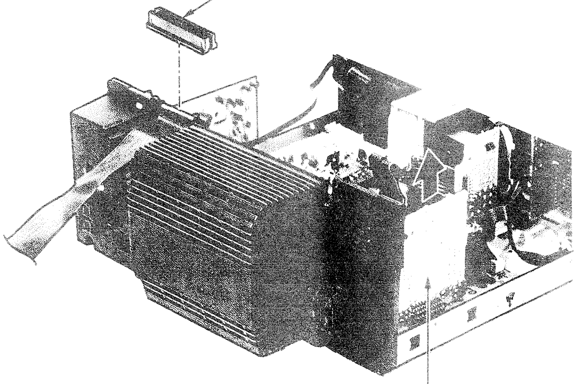


3. Checking for the main P.C.B.

- Follow the **Step 1** ~ **Step 3** of the item 1 in checking procedure for each P.C.B. on page 14.

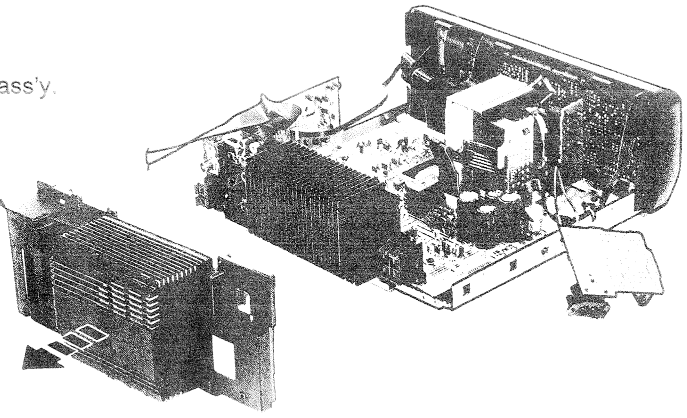


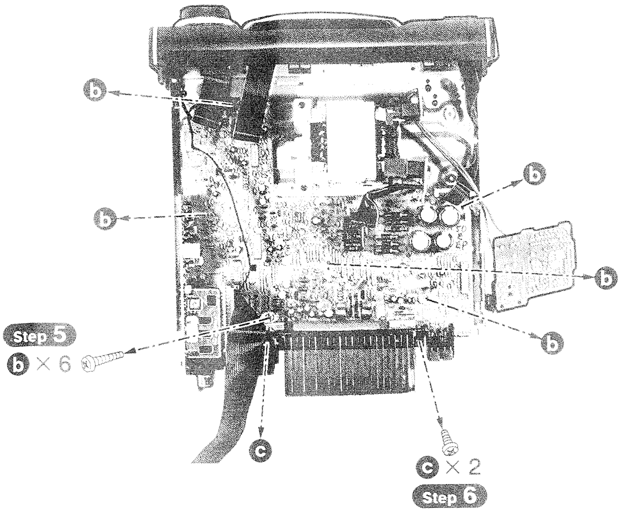
Step 2
Remove the cable holder.

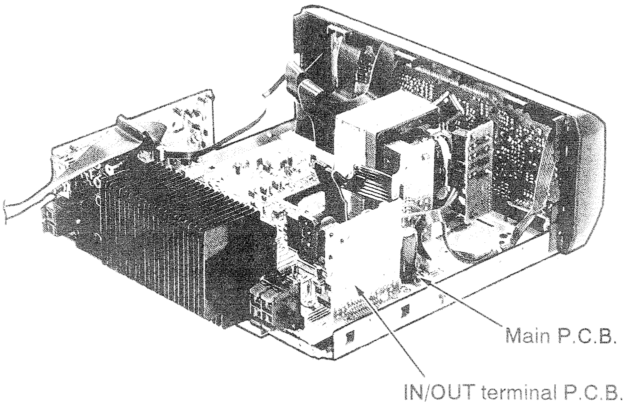


Step 3
Pull out the IN/OUT terminal
P.C.B. in the direction of arrow.

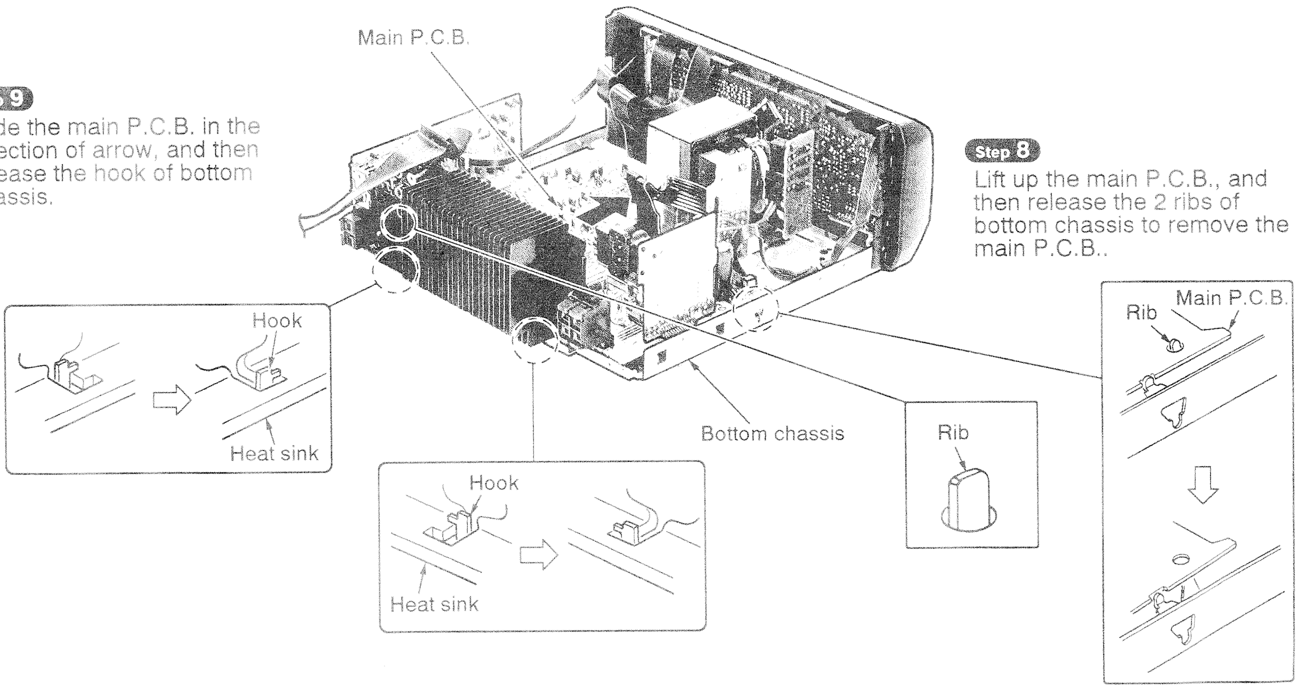
Step 4
Remove the rear grille ass'y.




ⓑ
ⓑ
ⓑ
ⓑ
ⓑ
ⓑ
Step 5
ⓑ × 6
ⓒ
ⓒ × 2
Step 6


Main P.C.B.
IN/OUT terminal P.C.B.

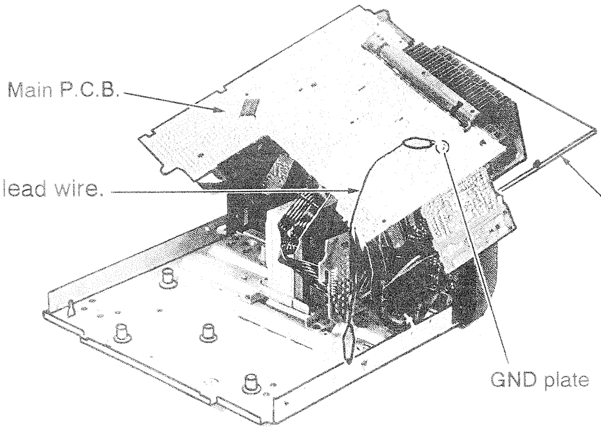
Step 7
Reinstall the IN/OUT terminal P.C.B. to the main P.C.B..


Main P.C.B.
Hook
Heat sink
Bottom chassis
Hook
Heat sink
Rib
Rib
Main P.C.B.

Step 9
Slide the main P.C.B. in the direction of arrow, and then release the hook of bottom chassis.

Step 8
Lift up the main P.C.B., and then release the 2 ribs of bottom chassis to remove the main P.C.B..

• **Check the main P.C.B. as shown below.**


Main P.C.B.
GND plate

Step 10
Connect the lead wire.

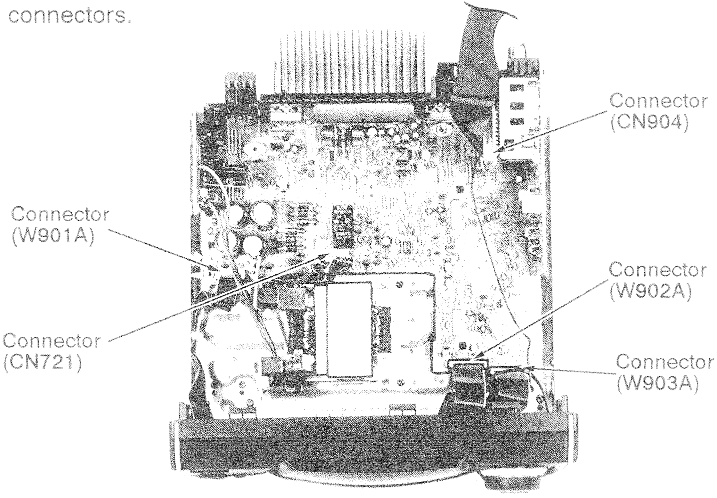
NOTE
Insulate main P.C.B. with insulation material to avoid short–circuit.

Main Component Replacement procedures

1. Replacement for the power IC and regulator transistor

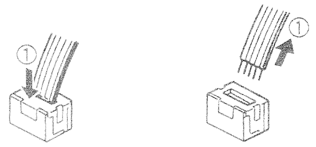
- Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 14.
- Follow the Step 1 ~ Step 9 of the item 3 in checking procedure for each P.C.B. on pages 15 and 16.

Step 1
Remove the flat cables from connectors.

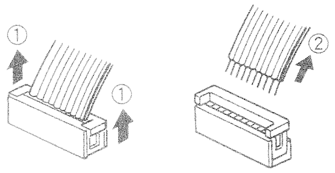

Connector (CN904)
Connector (W901A)
Connector (CN721)
Connector (W902A)
Connector (W903A)

Removal of the connector

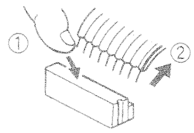
- Connector (CN904)

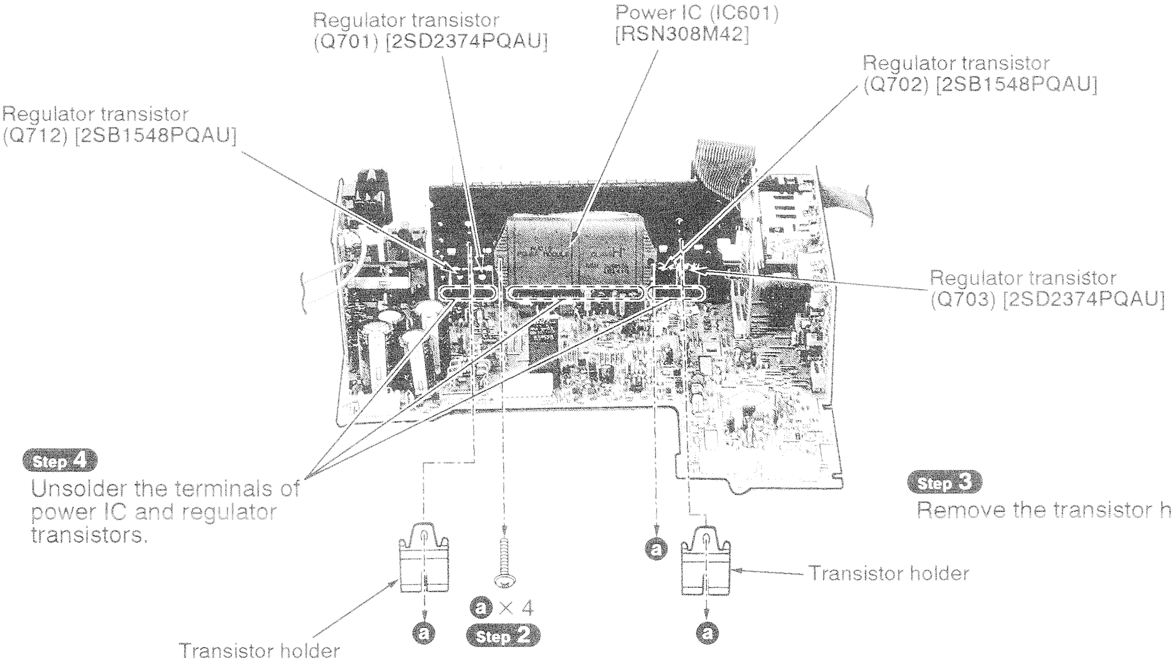


- Connectors (W901A, W902A, W903A)



- Connector (CN721)




Regulator transistor (Q701) [2SD2374PQAU]
Power IC (IC601) [RSN308M42]
Regulator transistor (Q702) [2SB1548PQAU]
Regulator transistor (Q712) [2SB1548PQAU]
Regulator transistor (Q703) [2SD2374PQAU]
Transistor holder
Transistor holder
a
a
a
a × 4

Step 4
Unsolder the terminals of power IC and regulator transistors.

Step 2

Step 3
Remove the transistor holder.

NOTE
When mounting the power IC or regulator transistor apply silicone conpound (RFKX0002) to the rear side of power IC or regulator transistors.

■ To Supply Power Source

Power Supply to This Unit Alone

1. Short the section between **7 pin** and **10 pin** of the connector **W202** in Fig. 1.
2. Connect this unit to an AC Power Cord.
   (This unit come to stand-by mode.)
3. Turn the unit ON.

To check Operation

1. Set this unit to Power ON mode.
2. Input a signal and confirm it to be outputted from the speaker terminal.

	INPUT	OUTPUT
L-ch	VDP(AUX) or VCR(EXT)	L-ch speaker terminal
R-ch	VDP(AUX) or VCR(EXT)	L-ch speaker terminal
Surround	VDP(AUX) or VCR(EXT)	Surround speaker terminal
Center	VDP(AUX) or VCR(EXT)	Center speaker terminal

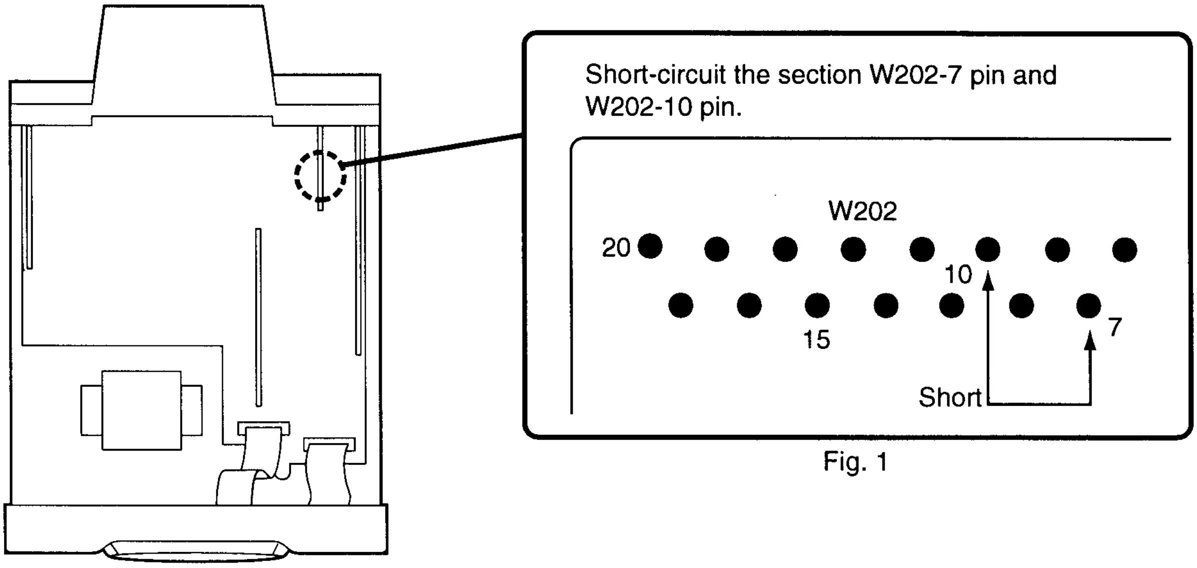
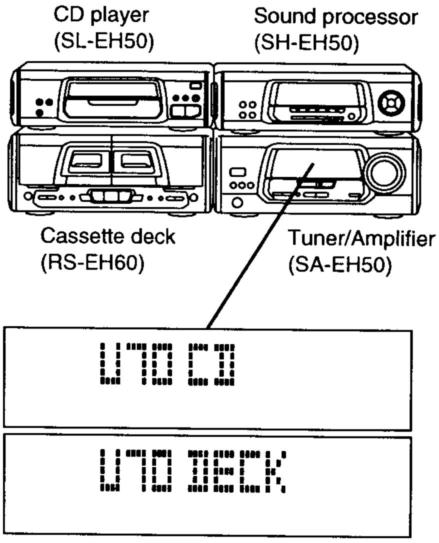

Short-circuit the section W202-7 pin and W202-10 pin.

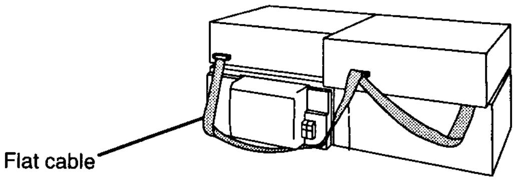
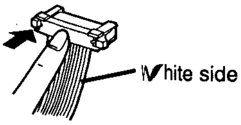
Fig. 1

■About the Self-Diagnostic Mode

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction. Use this self-diagnostic function when servicing the unit.

Display method	Display location
To display the malfunction code U-70 CD: U-70 DECK: ..... Automatically displays on the tuner/sound processor when a malfunction occurs. F-61 .... Automatically displays on the tuner/sound processor when a malfunction occurs. **To return to the normal display** **1. For U-70 CD/U-70 DECK:** ● Press an any operation button on the tuner/amplifier. ● To re-display the code, switch the power off (POWER STANDBY button), and then switch power back on again. **2. For F-61:** ● If "F-61" is displayed, the power will automatically be switched off and the standby indicator will light up. ● "F-61" will be displayed for 3 seconds, and then the clock will be displayed. ● To re-display the code, switch the power on. "F-61" will be re-displayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off.	 CD player (SL-EH50) Sound processor (SH-EH50) Cassette deck (RS-EH60) Tuner/Amplifier (SA-EH50) U70 CD U70 DECK

Display contents

Display code	Problem or condition	Correction procedure
U-70 CD **U-70 DECK** (displayed automatically)	A bus-line communications error has occurred as a result of the flat cables being inserted incorrectly, thus preventing the system from operating. 1.If "U-70" is displayed on the tuner/amplifier, the tape deck or CD Changer cannot be operated by remote control.	 1. To check for correct insertion of the flat cables. ①Insert each connector until you hear a click. ②Insert the flat cables at the back of the unit in the order indicated. Make sure the white side of the cable is on your right side.  2. Breakage of flat cable. (Check and replace as necessary.) 3. If the problem is not corrected by items (1.) and (2.) above, this indicates a faulty IC. **SA-EH50:** IC901 (M38199MF100K) **SL-EH50:** IC403 (LC66356B4J28) **RS-EH60:** IC701 (M37471M4660F) Check these IC's and replace as necessary.
F-61	When the power switch is switched on, it automatically switches back off, making it impossible to switch power on.	● Faulty Tuner/Amplifier (SA-EH50) output IC (IC601). (When a DC voltage is applied to the speaker terminals.)

■ Schematic Diagram

Page
B OPERATION CIRCUIT .... 21 ~ 23
A TUNER CIRCUIT .... 24 ~ 31
E IN/OUT TERMINAL CIRCUIT 32
F MAIN CIRCUIT .... 32 ~ 38
G POWER SUPPLY CIRCUIT 38
H POWER TRANSFORMER (A) CIRCUIT 38
I POWER TRANSFORMER (B) CIRCUIT 38

For (GC) area only

Page
C MIC JACK CIRCUIT 23
D DOLBY PROLOGIC CIRCUIT 30, 31
G POWER SUPPLY CIRCUIT 39
H POWER TRANSFORMER (A) CIRCUIT 39
I POWER TRANSFORMER (B) CIRCUIT 39

For (EG) and (EP) areas

J RDS CIRCUIT 40

- **This schematic diagram may be modified at any time with the development of new technology.**

Notes:

- **S901** : Power "STANDBY ⏻ /ON" switch (POWER STANDBY ⏻ /ON)
- **S902** : Clock/timer switch (CLOCK/TIMER)
- **S903** : Record timer switch (◴ REC)
- **S904** : Play timer switch (◴ PLAY)
- **S905** : Tuning mode select switch (TUNING MODE)
- **S906** : Set switch (SET)
- **S907** : FM mode select switch (FM AUTO/MONO)
- **S908** : Source input select switch (INPUT SELECTOR)
- **S909** : Tuning down switch (TUNING ∨)
- **S910** : Tuning up switch (TUNING ∧)
- **S911** : Tuner/band select switch (TUNER/BAND)
- **S912** : V.bass switch (V.BASS)
- **VR901** : Volume control (VOLUME)

For (EG) and (EP) areas

- **S913** : RDS display mode select switch (PS)
- **S914** : RDS display mode select switch (PTY)

For (GC) area

- **S701** : Voltage adjust switch
- **S913** : Karaoke switch (KARAOKE)
- **S914** : Echo switch (ECHO)
- **VR401** : Microphone volume control (MIC VOL)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
  No mark: FM ( ): AM

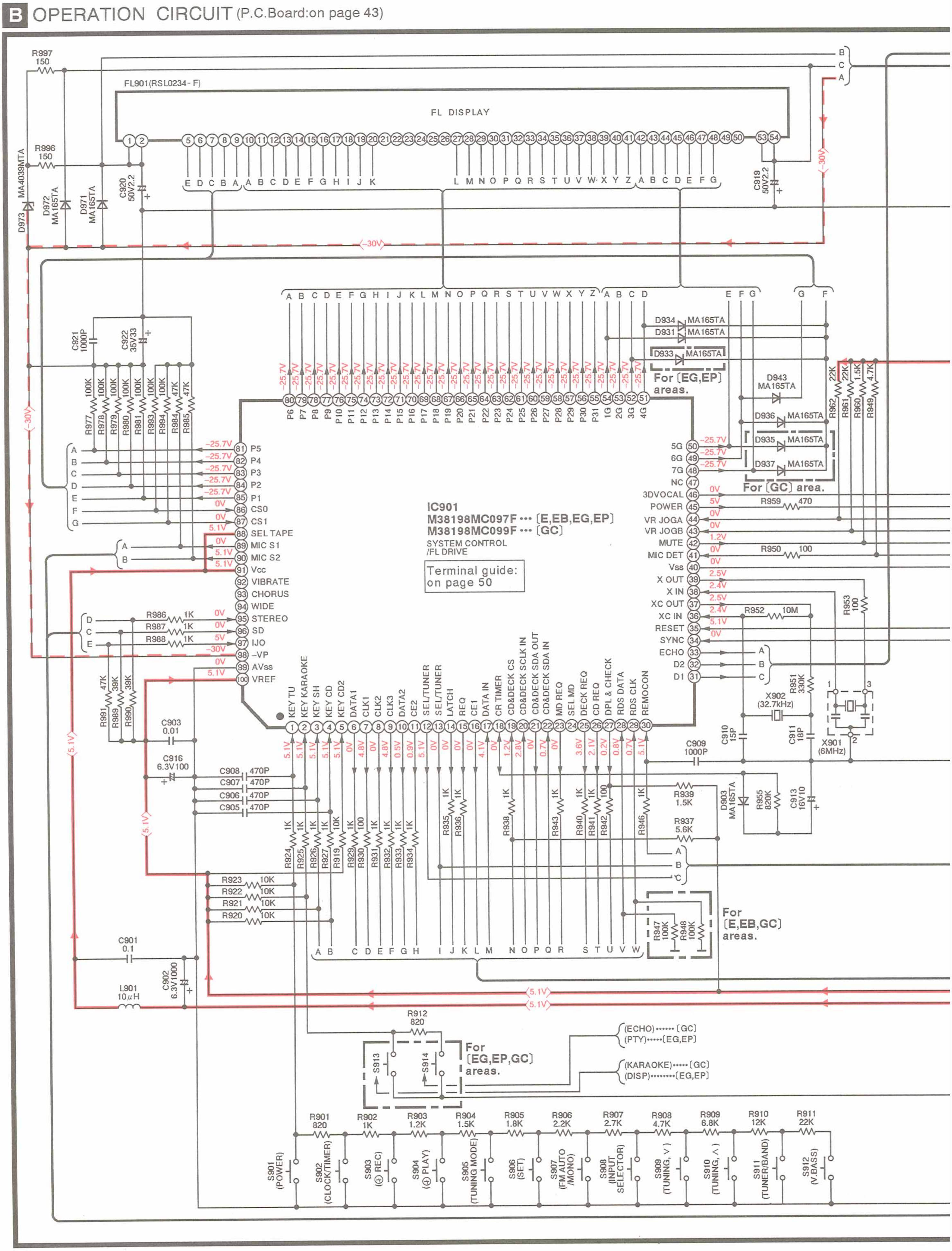
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the list.

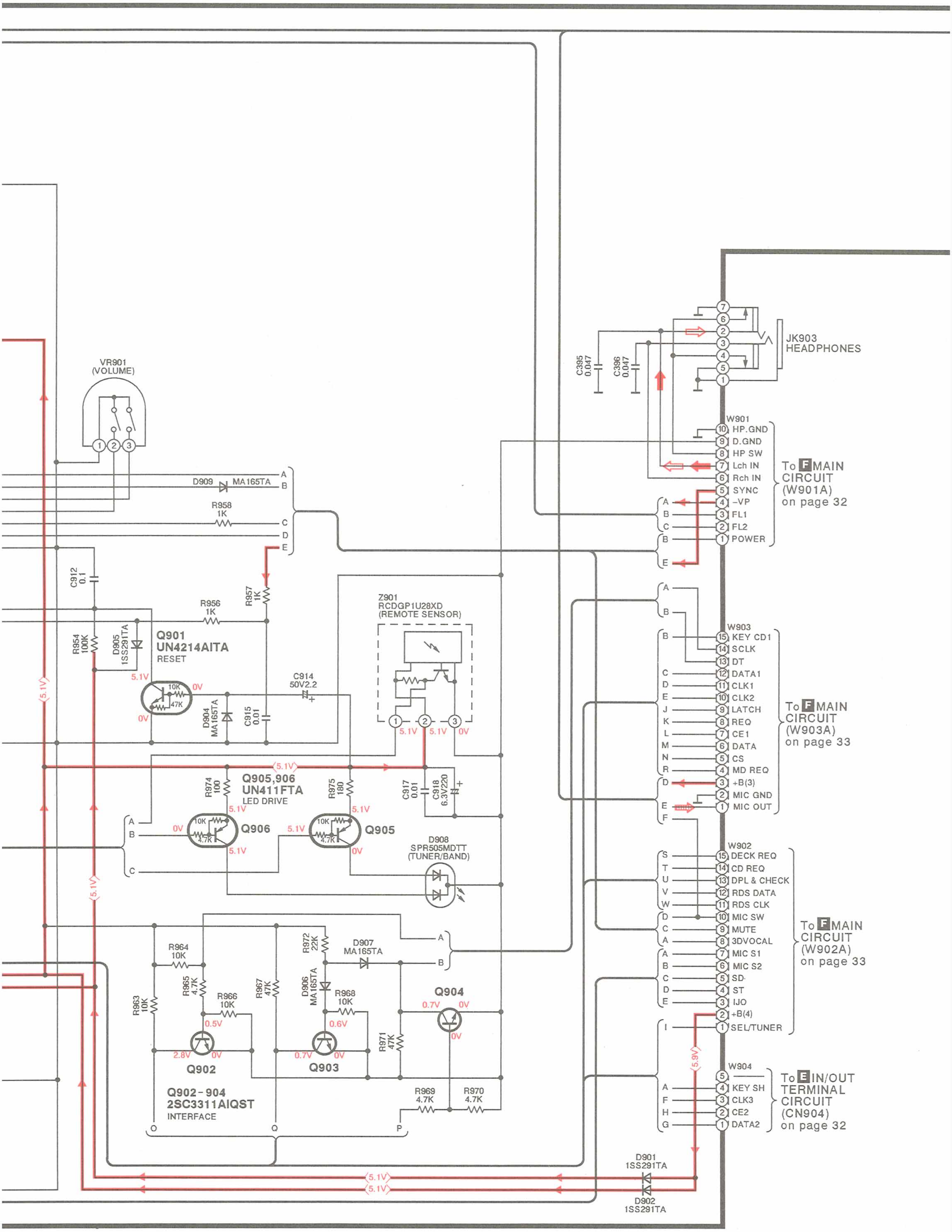
- **Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the work table.
  Do not touch the legs of IC or LSI with the fingers directly.

- **Voltage and signal line**

──▶──	: Positive voltage line	╍╍▶╍╍	:Negative voltage line
➡	: AM signal Line	▥⇨	:Mic signal Line
■■■➡	: AM OSC signal line	▨⇨	:Surround Speaker Drive signal line
⇨	: FM signal line	⇒	:Center Speaker Drive signal line
□□□⇨	: FM OSC signal line		

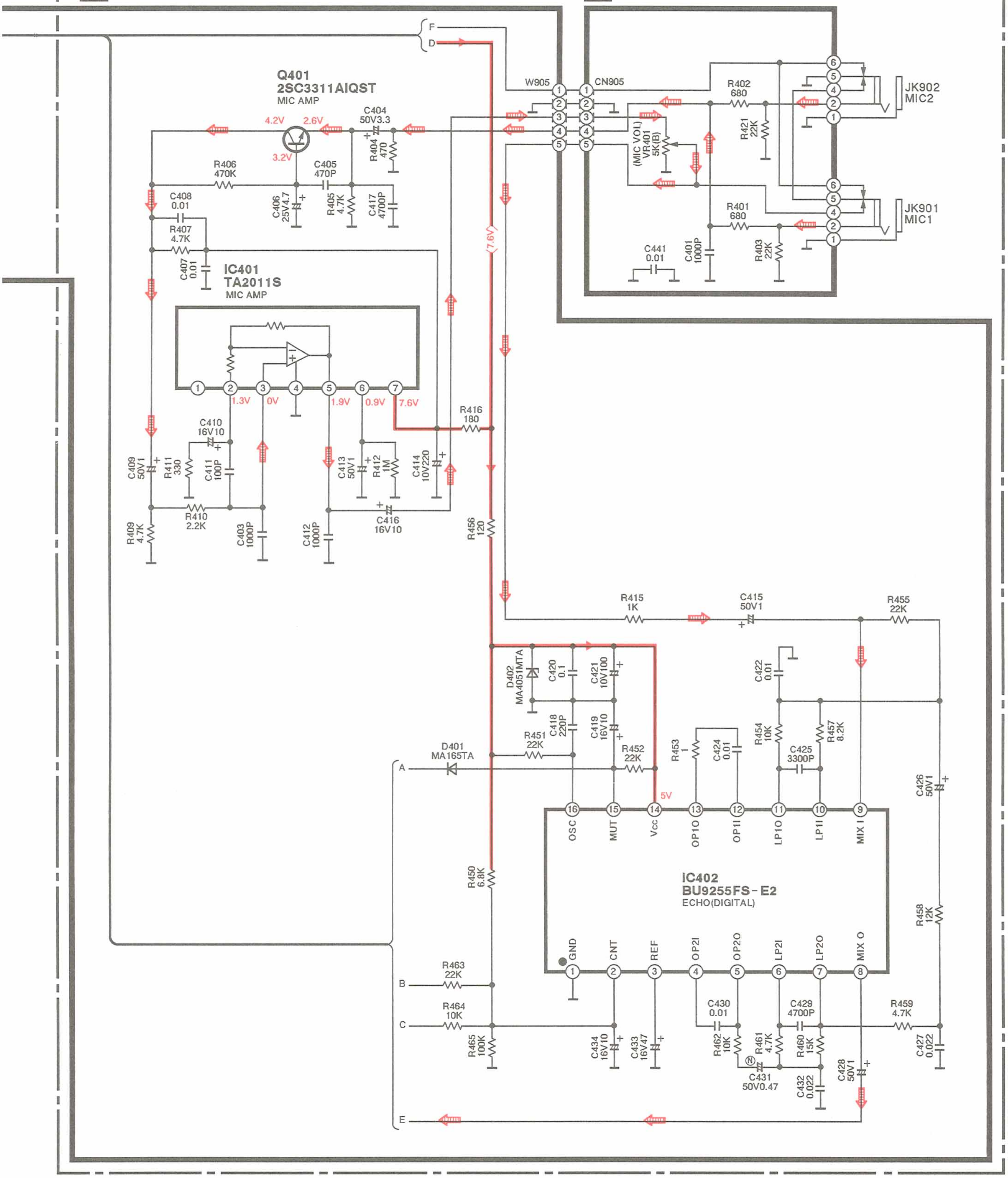
B OPERATION CIRCUIT (P.C.Board:on page 43)


R997
150
FL901(RSL0234-F)
FL DISPLAY
R996
150
D973 MA4039MTA
D972 MA165TA
D971 MA165TA
C920 50V2.2
C919 50V2.2
(-30V)
C921 1000P
C922 35V33
R977 100K
R978 100K
R979 100K
R980 100K
R981 100K
R993 100K
R994 100K
R984 47K
R985 47K
IC901
M38198MC097F ··· [E,EB,EG,EP]
M38198MC099F ··· [GC]
SYSTEM CONTROL
/FL DRIVE
Terminal guide:
on page 50
P5
P4
P3
P2
P1
CS0
CS1
SEL TAPE
MIC S1
MIC S2
Vcc
VIBRATE
CHORUS
WIDE
STEREO
SD
IJO
-VP
AVss
VREF
P6
P7
P8
P9
P10
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
P31
1G
2G
3G
4G
5G
6G
7G
NC
3DVOCAL
POWER
VR JOGA
VR JOGB
MUTE
MIC DET
Vss
X OUT
X IN
XC OUT
XC IN
RESET
SYNC
ECHO
D2
D1
KEY TU
KEY KARAOKE
KEY SH
KEY CD
KEY CD2
DATA1
CLK1
CLK2
CLK3
DATA2
CE2
SEL/TUNER
SEL/TUNER
LATCH
REQ
CE1
DATA IN
CR TIMER
CD&DECK CS
CD&DECK SCLK IN
CD&DECK SDA OUT
CD&DECK SDA IN
MD REQ
SEL MD
DECK REQ
CD REQ
DPL & CHECK
RDS DATA
RDS CLK
REMOCON
D934 MA165TA
D931 MA165TA
D933 MA165TA
For [EG,EP] areas.
D943 MA165TA
D936 MA165TA
D935 MA165TA
D937 MA165TA
For [GC] area.
R962 22K
R961 22K
R960 1.5K
R949 4.7K
R959 470
R950 100
R952 10M
R953 100
R951 330K
X902 (32.7kHz)
X901 (6MHz)
C910 15P
C911 18P
C909 1000P
R939 1.5K
R937 5.6K
D903 MA165TA
R955 820K
C913 16V10
R986 1K
R987 1K
R988 1K
R991 47K
R989 39K
R990 39K
C903 0.01
C916 6.3V100
C908 470P
C907 470P
C906 470P
C905 470P
R924 1K
R925 1K
R926 1K
R927 1K
R919 10K
R929 1K
R930 100
R931 1K
R932 1K
R933 1K
R934 1K
R935 1K
R936 1K
R938 1K
R943 1K
R940 1K
R941 1K
R942 100
R946 1K
R923 10K
R922 10K
R921 10K
R920 10K
R947 100K
R948 100K
For [E,EB,GC] areas.
C901 0.1
C902 6.3V1000
L901 10μH
(5.1V)
R912 820
S913
S914
For [EG,EP,GC] areas.
(ECHO)······[GC]
(PTY)······[EG,EP]
(KARAOKE)······[GC]
(DISP)········[EG,EP]
R901 820
R902 1K
R903 1.2K
R904 1.5K
R905 1.8K
R906 2.2K
R907 2.7K
R908 4.7K
R909 6.8K
R910 12K
R911 22K
S901 (POWER)
S902 (CLOCK/TIMER)
S903 (⊕ REC)
S904 (⊕ PLAY)
S905 (TUNING MODE)
S906 (SET)
S907 (FM AUTO /MONO)
S908 (INPUT SELECTOR)
S909 (TUNING, ∨)
S910 (TUNING, ∧)
S911 (TUNER/BAND)
S912 (V.BASS)


VR901
(VOLUME)
D909 MA165TA
R958
1K
R957
1K
C912
0.1
R956
1K
R954
100K
D905
1SS291TA
Q901
UN4214AITA
RESET
5.1V
0V
10K
47K
0V
D904
MA165TA
C915
0.01
C914
50V2.2
Z901
RCDGP1U28XD
(REMOTE SENSOR)
5.1V
5.1V
0V
(5.1V)
R974
100
Q905,906
UN411FTA
LED DRIVE
R975
180
C917
0.01
C918
6.3V220
5.1V
5.1V
Q906
Q905
0V
5.1V
5.1V
0V
10K
4.7K
D908
SPR505MDTT
(TUNER/BAND)
R964
10K
R965
4.7K
R966
10K
R963
10K
R967
47K
R972
22K
D907
MA165TA
D906
MA165TA
R968
10K
Q904
0.7V
0V
0V
R971
47K
0.5V
0.6V
2.8V
0V
0.7V
0V
Q902
Q903
Q902-904
2SC3311AIQST
INTERFACE
R969
4.7K
R970
4.7K
O
Q
P
(5.1V)
(5.1V)
(5.9V)
D901
1SS291TA
D902
1SS291TA
C395
0.047
C396
0.047
JK903
HEADPHONES
W901
10 HP.GND
9 D.GND
8 HP SW
7 Lch IN
6 Rch IN
5 SYNC
4 -VP
3 FL1
2 FL2
1 POWER
To F MAIN CIRCUIT (W901A) on page 32
W903
15 KEY CD1
14 SCLK
13 DT
12 DATA1
11 CLK1
10 CLK2
9 LATCH
8 REQ
7 CE1
6 DATA
5 CS
4 MD REQ
3 +B(3)
2 MIC GND
1 MIC OUT
To F MAIN CIRCUIT (W903A) on page 33
W902
15 DECK REQ
14 CD REQ
13 DPL & CHECK
12 RDS DATA
11 RDS CLK
10 MIC SW
9 MUTE
8 3DVOCAL
7 MIC S1
6 MIC S2
5 SD
4 ST
3 IJO
2 +B(4)
1 SEL/TUNER
To F MAIN CIRCUIT (W902A) on page 33
W904
5
4 KEY SH
3 CLK3
2 CE2
1 DATA2
To E IN/OUT TERMINAL CIRCUIT (CN904) on page 32
A
B
C
D
E
S
T
U
V
W
F
G
H
I
J
K
L
M
N
R

B OPERATION CIRCUIT (P.C.Board:on page 43)

C MIC JACK CIRCUIT (P.C.Board:on page 44)


F
D
Q401
2SC3311AIQST
MIC AMP
4.2V
2.6V
3.2V
C404
50V3.3
R404
470
R406
470K
C405
470P
C408
0.01
C406
25V4.7
R405
4.7K
C417
4700P
R407
4.7K
C407
0.01
IC401
TA2011S
MIC AMP
1.3V
0V
1.9V
0.9V
7.6V
(7.6V)
R416
180
C410
16V10
C409
50V1
R411
330
C411
100P
C413
50V1
R412
1M
C414
10V220
R409
4.7K
R410
2.2K
C403
1000P
C412
1000P
C416
16V10
R456
120
W905
CN905
(MIC VOL)
VR401
5K(B)
R402
680
R421
22K
JK902
MIC2
JK901
MIC1
R401
680
C441
0.01
C401
1000P
R403
22K
R415
1K
C415
50V1
R455
22K
D402
MA4051MTA
C420
0.1
C421
10V100
C422
0.01
C418
220P
C419
16V10
R451
22K
R452
22K
R453
1
C424
0.01
R454
10K
C425
3300P
R457
8.2K
D401
MA165TA
A
5V
C426
50V1
IC402
BU9255FS-E2
ECHO(DIGITAL)
OSC
MUT
Vcc
OP1O
OP1I
LP1O
LP1I
MIX I
GND
CNT
REF
OP2I
OP2O
LP2I
LP2O
MIX O
R450
6.8K
R458
12K
R463
22K
B
R464
10K
C
R465
100K
C434
16V10
C433
16V47
C430
0.01
R462
10K
R461
4.7K
C431
50V0.47
C429
4700P
R460
15K
C432
0.022
C428
50V1
R459
4.7K
C427
0.022
E

For [GC] area.

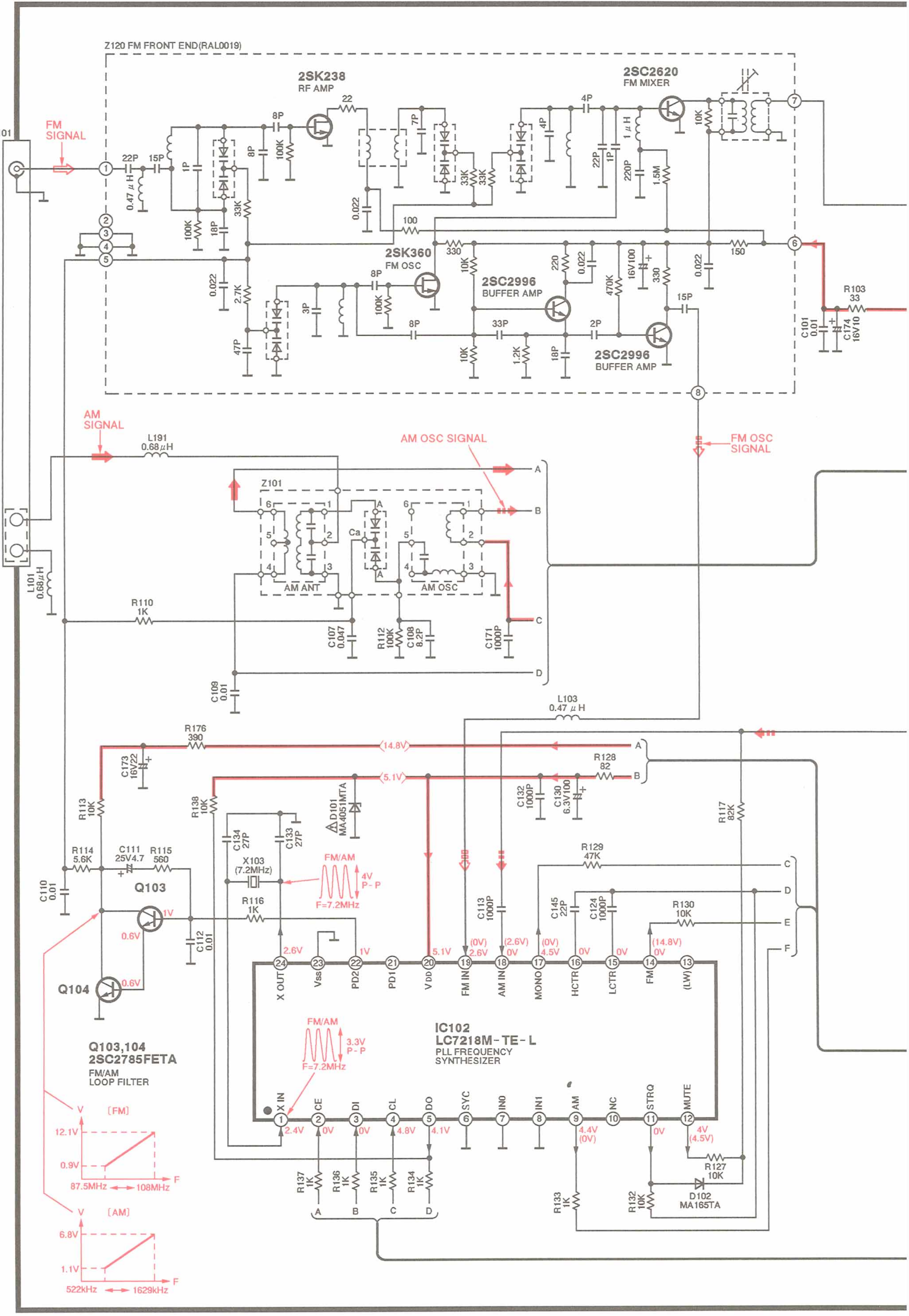
▬▶ : Positive voltage line

⇨ : FM signal line

➡ : AM signal Line

▥▷ : Mic signal Line

A TUNER CIRCUIT For〔E,EB〕areas. (P.C.Board:on page 42)


Z120 FM FRONT END(RAL0019)
2SK238
RF AMP
2SC2620
FM MIXER
2SK360
FM OSC
2SC2996
BUFFER AMP
2SC2996
BUFFER AMP
JK101
FM ANT
(75 Ω)
FM SIGNAL
AM SIGNAL
AM OSC SIGNAL
FM OSC SIGNAL
AM ANT
EXT
LOOP
L191
0.68μH
L101
0.68μH
Z101
AM ANT
AM OSC
R110
1K
C107
0.047
R112
100K
C108
8.2P
C171
1000P
C109
0.01
R103
33
C101
0.01
C174
16V10
L103
0.47 μH
R176
390
C173
16V22
R113
10K
R138
10K
D101
MA4051MTA
C134
27P
C133
27P
X103
(7.2MHz)
R128
82
C132
1000P
C130
6.3V100
R117
82K
R129
47K
R114
5.6K
C111
25V4.7
R115
560
C110
0.01
Q103
Q104
C112
0.01
R116
1K
FM/AM
4V
P-P
F=7.2MHz
C113
1000P
C145
22P
C124
1000P
R130
10K
(14.8V)
(5.1V)
IC102
LC7218M-TE-L
PLL FREQUENCY
SYNTHESIZER
X OUT
Vss
PD2
PD1
V DD
FM IN
AM IN
MONO
HCTR
LCTR
FM
(LW)
X IN
CE
DI
CL
DO
SYC
IN0
IN1
AM
NC
STRQ
MUTE
FM/AM
3.3V
P-P
F=7.2MHz
Q103,104
2SC2785FETA
FM/AM
LOOP FILTER
[FM]
12.1V
0.9V
87.5MHz
108MHz
[AM]
6.8V
1.1V
522kHz
1629kHz
R137 1K
R136 1K
R135 1K
R134 1K
R133 1K
R132 10K
R127 10K
D102
MA165TA

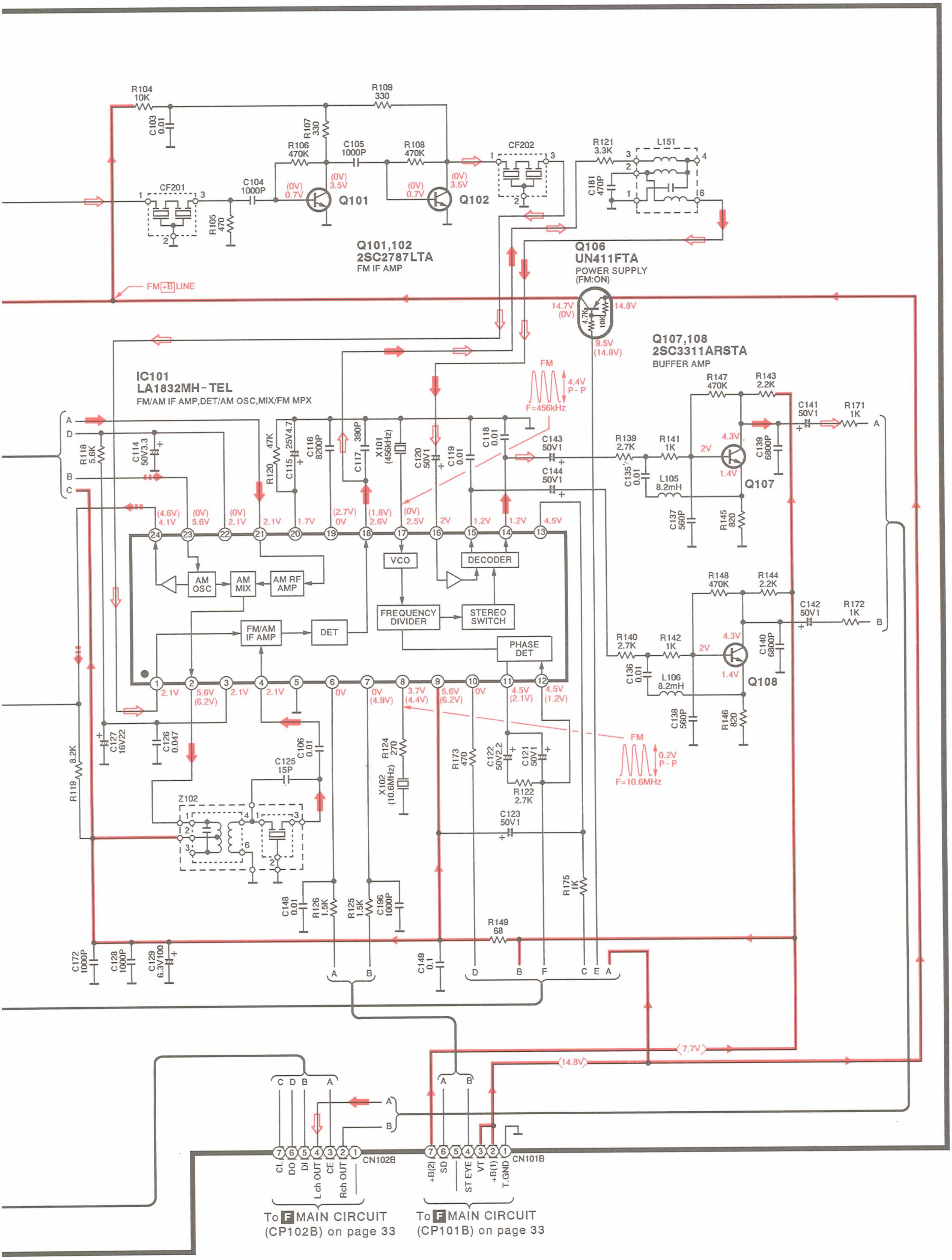
: Positive voltage line

: AM signal Line

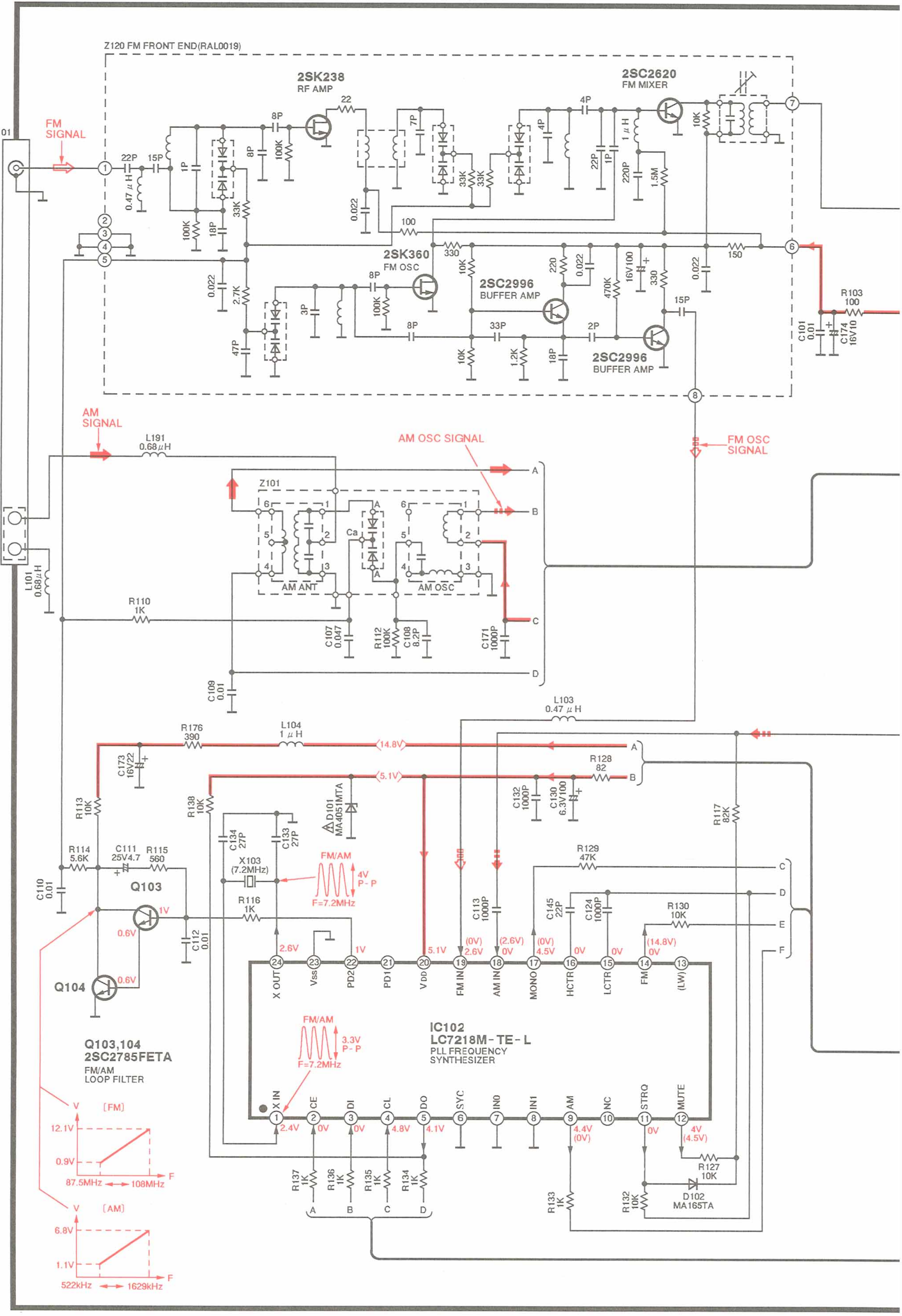
: FM signal line

: AM OSC signal line

: FM OSC signal line


R104 10K
C103 0.01
R109 330
R107 330
R106 470K
C105 1000P
R108 470K
CF202
R121 3.3K
L151
C181 470P
CF201
C104 1000P
R105 470
(0V) 0.7V
(0V) 3.5V
Q101
(0V) 0.7V
(0V) 3.5V
Q102
Q101,102
2SC2787LTA
FM IF AMP
Q106
UN411FTA
POWER SUPPLY
(FM:ON)
FM+B LINE
14.7V (0V)
14.8V
9.5V (14.8V)
4.7K
10K
Q107,108
2SC3311ARSTA
BUFFER AMP
IC101
LA1832MH-TEL
FM/AM IF AMP,DET/AM OSC,MIX/FM MPX
FM
4.4V P-P
F=456kHz
R118 5.6K
C114 50V3.3
R120 47K
C115 25V4.7
C116 8200P
C117 390P
X101 (456kHz)
C120 50V1
C119 0.01
C118 0.01
C143 50V1
C144 50V1
R139 2.7K
R141 1K
R147 470K
R143 2.2K
C141 50V1
R171 1K
4.3V
2V
1.4V
C139 6800P
C135 0.01
L105 8.2mH
C137 560P
R145 820
Q107
(4.6V) 4.1V
(0V) 5.6V
(0V) 2.1V
2.1V
1.7V
(2.7V) 0V
(1.8V) 2.6V
(0V) 2.5V
2V
1.2V
1.2V
4.5V
AM OSC
AM MIX
AM RF AMP
VCO
DECODER
FREQUENCY DIVIDER
STEREO SWITCH
FM/AM IF AMP
DET
PHASE DET
R148 470K
R144 2.2K
C142 50V1
R172 1K
R140 2.7K
R142 1K
4.3V
2V
1.4V
C140 6800P
C136 0.01
L106 8.2mH
C138 560P
R146 820
Q108
2.1V
5.6V (6.2V)
2.1V
2.1V
0V
0V (4.9V)
3.7V (4.4V)
5.6V (6.2V)
0V
4.5V (2.1V)
4.5V (1.2V)
FM
0.2V P-P
F=10.6MHz
C127 16V22
C126 0.047
C106 0.01
C125 15P
R124 270
X102 (10.6MHz)
R173 470
C122 50V2.2
C121 50V1
R122 2.7K
C123 50V1
R119 8.2K
Z102
C148 0.01
R126 1.5K
R125 1.5K
C196 1000P
R175 1K
R149 68
C172 1000P
C128 1000P
C129 6.3V100
C149 0.1
(7.7V)
(14.8V)
CL
DO
DI
L ch OUT
CE
Rch OUT
CN102B
+B(2)
SD
ST EYE
VT
+B(1)
T.GND
CN101B
To F MAIN CIRCUIT (CP102B) on page 33
To F MAIN CIRCUIT (CP101B) on page 33

A TUNER CIRCUIT For〔EG,EP〕areas. (P.C.Board:on page 42)


Z120 FM FRONT END(RAL0019)
2SK238
RF AMP
2SC2620
FM MIXER
2SK360
FM OSC
2SC2996
BUFFER AMP
2SC2996
BUFFER AMP
JK101
FM ANT
(75 Ω)
FM SIGNAL
AM SIGNAL
AM ANT
EXT
LOOP
L191
0.68µH
L101
0.68µH
R110
1K
Z101
AM ANT
AM OSC
Ca
AM OSC SIGNAL
FM OSC SIGNAL
C107
0.047
R112
100K
C108
8.2P
C171
1000P
C109
0.01
R103
100
C101
0.01
C174
16V10
L103
0.47 µH
R176
390
L104
1 µH
14.8V
5.1V
C173
16V22
R113
10K
R138
10K
D101
MA4051MTA
C134
27P
C133
27P
X103
(7.2MHz)
FM/AM
4V
P-P
F=7.2MHz
R128
82
C132
1000P
C130
6.3V100
R117
82K
R114
5.6K
C111
25V4.7
R115
560
C110
0.01
Q103
Q104
R116
1K
C112
0.01
R129
47K
C113
1000P
C145
22P
C124
1000P
R130
10K
IC102
LC7218M-TE-L
PLL FREQUENCY
SYNTHESIZER
X OUT
Vss
PD2
PD1
VDD
FM IN
AM IN
MONO
HCTR
LCTR
FM
(LW)
X IN
CE
DI
CL
DO
SYC
INO
IN1
AM
NC
STRQ
MUTE
FM/AM
3.3V
P-P
F=7.2MHz
Q103,104
2SC2785FETA
FM/AM
LOOP FILTER
[FM]
12.1V
0.9V
87.5MHz
108MHz
[AM]
6.8V
1.1V
522kHz
1629kHz
R137
1K
R136
1K
R135
1K
R134
1K
R133
1K
R132
10K
R127
10K
D102
MA165TA

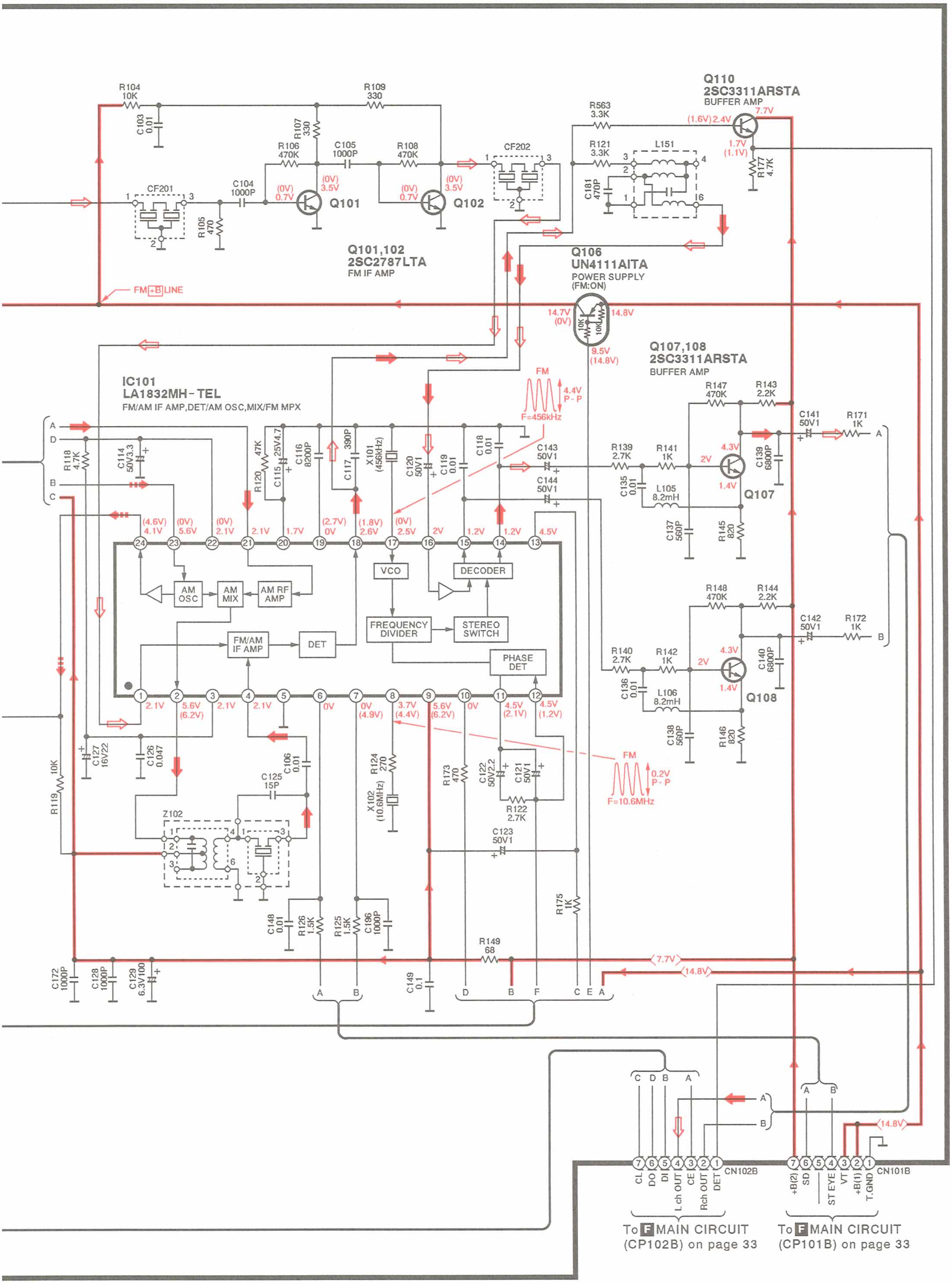
→ : Positive voltage line

➡ : AM signal Line

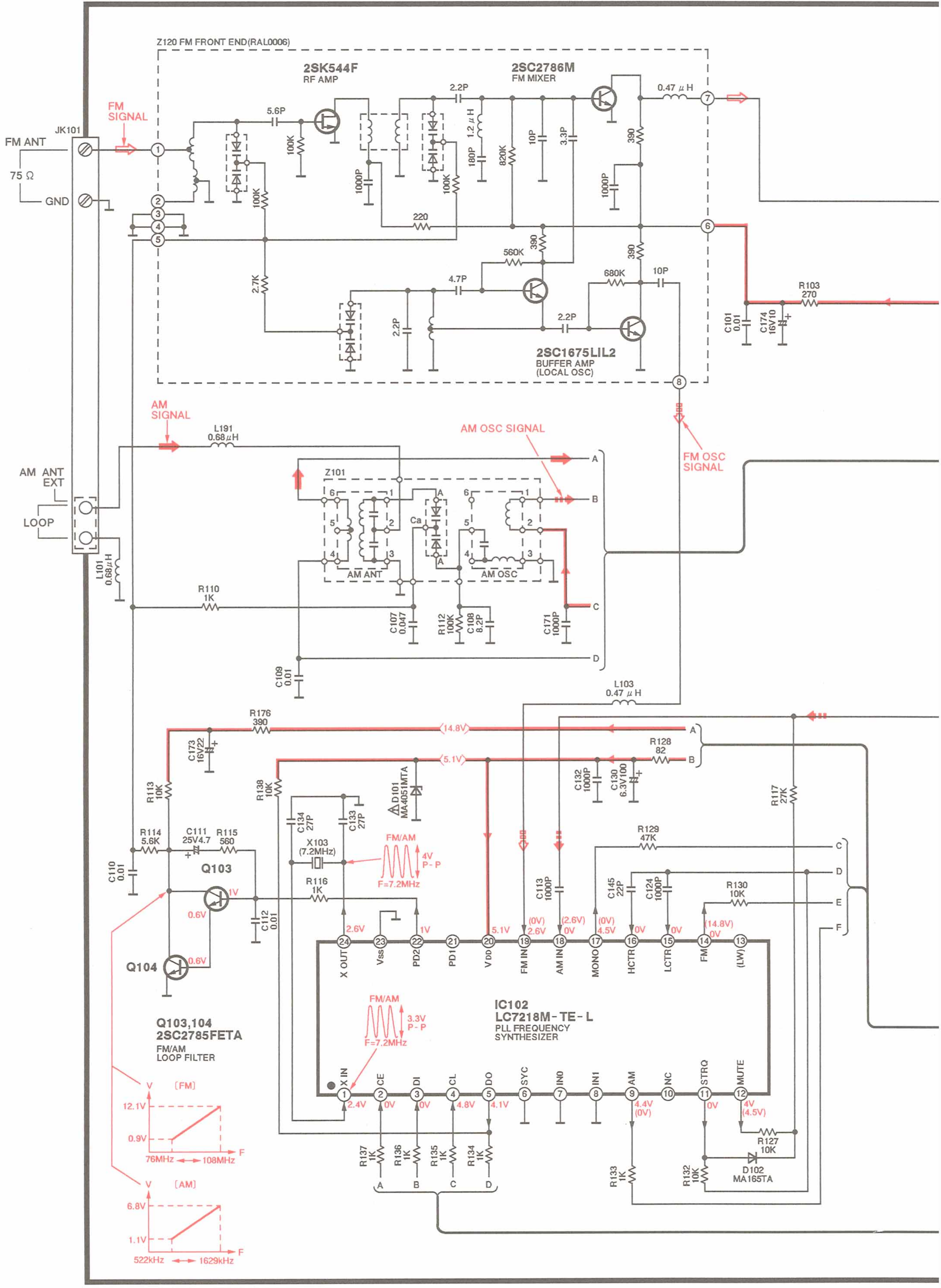
⇨ : FM signal line

▮▮▮➡ : AM OSC signal line

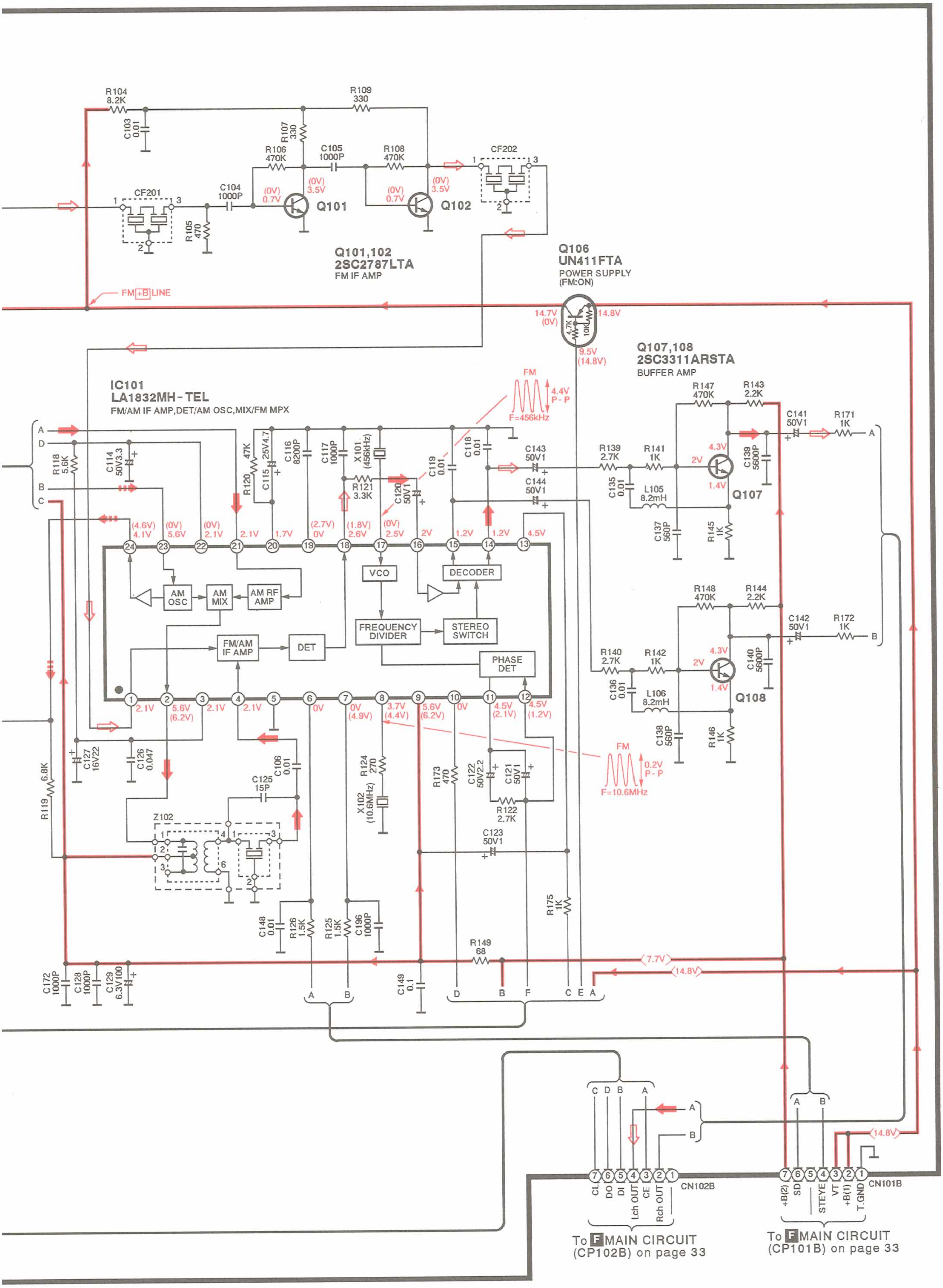
▯▯▯⇨ : FM OSC signal line


R104
10K
C103
0.01
R109
330
R107
330
R106
470K
C105
1000P
R108
470K
CF202
C104
1000P
CF201
R105
470
(0V)
0.7V
(0V)
3.5V
Q101
Q102
Q101,102
2SC2787LTA
FM IF AMP
FM +B LINE
Q110
2SC3311ARSTA
BUFFER AMP
7.7V
(1.6V) 2.4V
1.7V
(1.1V)
R177
4.7K
R563
3.3K
R121
3.3K
L151
C181
470P
Q106
UN4111AITA
POWER SUPPLY
(FM:ON)
14.7V
(0V)
14.8V
9.5V
(14.8V)
10K
Q107,108
2SC3311ARSTA
BUFFER AMP
IC101
LA1832MH-TEL
FM/AM IF AMP,DET/AM OSC,MIX/FM MPX
FM
4.4V
P-P
F=456kHz
R147
470K
R143
2.2K
C141
50V1
R171
1K
R118
4.7K
C114
50V3.3
R120
47K
C115
25V4.7
C116
8200P
C117
390P
X101
(456kHz)
C120
50V1
C119
0.01
C118
0.01
C143
50V1
C144
50V1
R139
2.7K
R141
1K
2V
4.3V
1.4V
C135
0.01
L105
8.2mH
C139
6800P
Q107
C137
560P
R145
820
(4.6V)
4.1V
(0V)
5.6V
(0V)
2.1V
2.1V
1.7V
(2.7V)
0V
(1.8V)
2.6V
(0V)
2.5V
2V
1.2V
1.2V
4.5V
VCO
DECODER
AM OSC
AM MIX
AM RF AMP
FREQUENCY DIVIDER
STEREO SWITCH
FM/AM IF AMP
DET
PHASE DET
R148
470K
R144
2.2K
C142
50V1
R172
1K
R140
2.7K
R142
1K
C136
0.01
L106
8.2mH
C140
6800P
Q108
C138
560P
R146
820
2.1V
5.6V
(6.2V)
2.1V
2.1V
0V
0V
(4.9V)
3.7V
(4.4V)
5.6V
(6.2V)
0V
4.5V
(2.1V)
4.5V
(1.2V)
FM
0.2V
P-P
F=10.6MHz
R119
10K
C127
16V22
C126
0.047
C106
0.01
C125
15P
Z102
R124
270
X102
(10.6MHz)
R173
470
C122
50V2.2
C121
50V1
R122
2.7K
C123
50V1
R175
1K
C148
0.01
R126
1.5K
R125
1.5K
C196
1000P
R149
68
(7.7V)
(14.8V)
C172
1000P
C128
1000P
C129
6.3V100
C149
0.1
CN102B
CL
DO
DI
L ch OUT
CE
Rch OUT
DET
CN101B
+B(2)
SD
ST EYE
VT
+B(1)
T.GND
To F MAIN CIRCUIT
(CP102B) on page 33
To F MAIN CIRCUIT
(CP101B) on page 33

A TUNER CIRCUIT For〔GC〕area. (P.C.Board:on page 43)

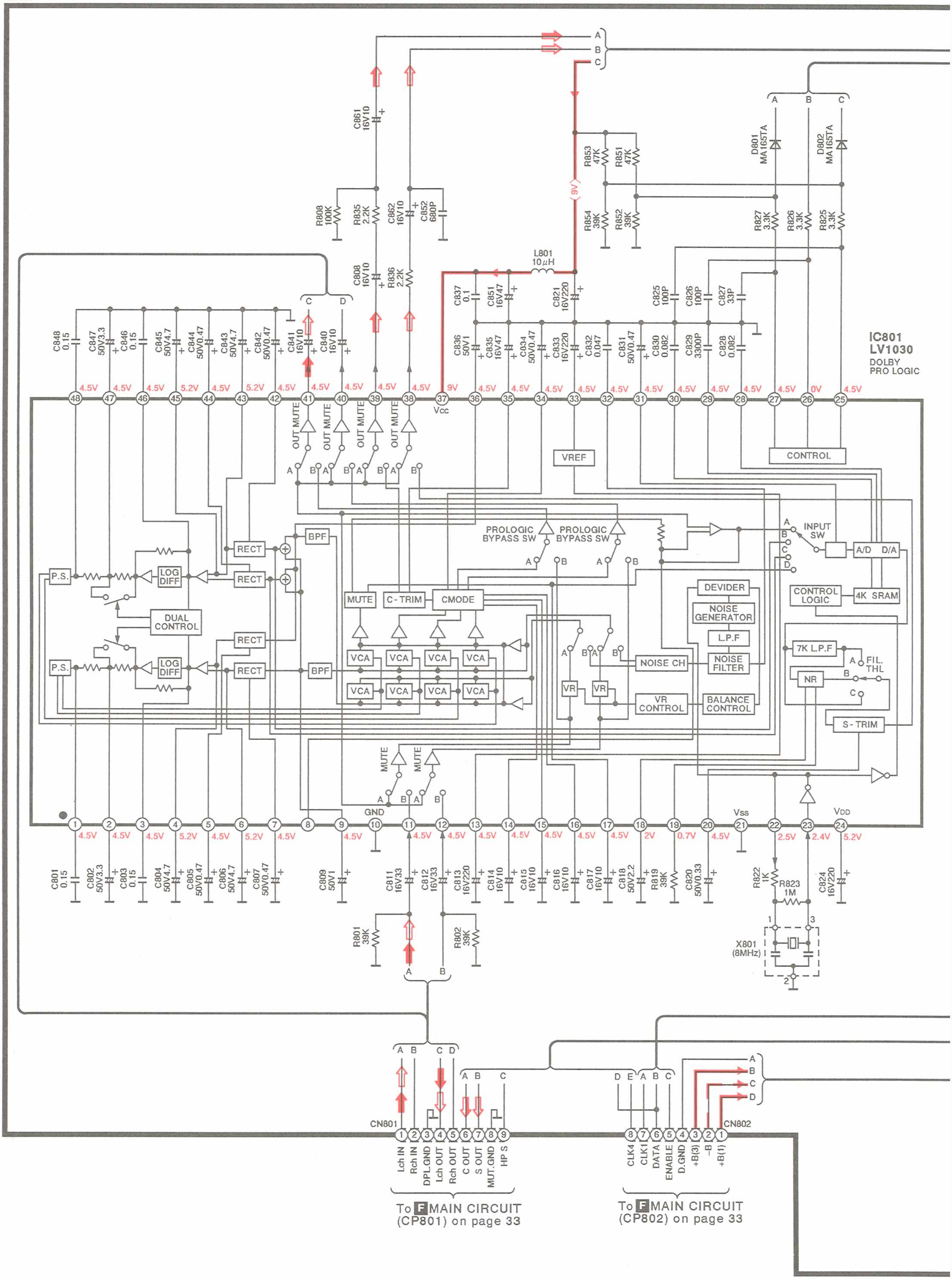

Z120 FM FRONT END(RAL0006)
2SK544F
RF AMP
2SC2786M
FM MIXER
2SC1675LIL2
BUFFER AMP
(LOCAL OSC)
FM ANT
75 Ω
GND
JK101
FM SIGNAL
AM SIGNAL
AM OSC SIGNAL
FM OSC SIGNAL
AM ANT EXT
LOOP
L191 0.68μH
L101 0.68μH
R110 1K
Z101
AM ANT
AM OSC
Ca
C107 0.047
R112 100K
C108 8.2P
C171 1000P
C109 0.01
C101 0.01
C174 16V10
R103 270
L103 0.47μH
R176 390
C173 16V22
R113 10K
R138 10K
D101 MA4051MTA
C134 27P
C133 27P
X103 (7.2MHz)
R116 1K
R114 5.6K
C111 25V4.7
R115 560
C110 0.01
C112 0.01
Q103
Q104
Q103,104 2SC2785FETA
FM/AM LOOP FILTER
R128 82
C132 1000P
C130 6.3V100
R117 27K
R129 47K
C113 1000P
C145 22P
C124 1000P
R130 10K
(14.8V)
(5.1V)
FM/AM
4V P-P
F=7.2MHz
3.3V P-P
IC102
LC7218M-TE-L
PLL FREQUENCY SYNTHESIZER
X OUT
Vss
PD2
PD1
V DD
FM IN
AM IN
MONO
HCTR
LCTR
FM
(LW)
X IN
CE
DI
CL
DO
SYC
IN0
IN1
AM
NC
STRO
MUTE
R137 1K
R136 1K
R135 1K
R134 1K
R133 1K
R132 10K
R127 10K
D102 MA165TA
V [FM]
12.1V
0.9V
76MHz
108MHz
F
V [AM]
6.8V
1.1V
522kHz
1629kHz

: Positive voltage line
: AM signal Line
: FM signal line
: AM OSC signal line
: FM OSC signal line


R104
8.2K
C103
0.01
R109
330
R107
330
R106
470K
C105
1000P
R108
470K
CF202
CF201
C104
1000P
R105
470
Q101
Q102
Q101,102
2SC2787LTA
FM IF AMP
Q106
UN411FTA
POWER SUPPLY
(FM:ON)
FM +B LINE
14.7V
(0V)
14.8V
9.5V
(14.8V)
Q107,108
2SC3311ARSTA
BUFFER AMP
IC101
LA1832MH-TEL
FM/AM IF AMP,DET/AM OSC,MIX/FM MPX
FM
4.4V
P-P
F=456kHz
R147
470K
R143
2.2K
C141
50V1
R171
1K
R139
2.7K
R141
1K
C143
50V1
C144
50V1
C135
0.01
L105
8.2mH
C139
5600P
C137
560P
R145
1K
Q107
R118
5.6K
C114
50V3.3
R120
47K
C115
25V4.7
C116
8200P
C117
1000P
X101
(456kHz)
R121
3.3K
C119
0.01
C120
50V1
C118
0.01
AM
OSC
AM
MIX
AM RF
AMP
VCO
DECODER
FREQUENCY
DIVIDER
STEREO
SWITCH
FM/AM
IF AMP
DET
PHASE
DET
R148
470K
R144
2.2K
C142
50V1
R172
1K
R140
2.7K
R142
1K
C136
0.01
L106
8.2mH
C140
5600P
C138
560P
R146
1K
Q108
FM
0.2V
P-P
F=10.6MHz
C127
16V22
C126
0.047
C106
0.01
C125
15P
R119
6.8K
Z102
R124
270
X102
(10.6MHz)
R173
470
C122
50V2.2
C121
50V1
R122
2.7K
C123
50V1
R175
1K
C148
0.01
R126
1.5K
R125
1.5K
C196
1000P
R149
68
C149
0.1
C172
1000P
C128
1000P
C129
6.3V100
7.7V
14.8V
CN102B
CL
DO
DI
Lch OUT
CE
Rch OUT
CN101B
+B(2)
SD
STEYE
VT
+B(1)
T.GND
To F MAIN CIRCUIT
(CP102B) on page 33
To F MAIN CIRCUIT
(CP101B) on page 33

)

D DOLBY PROLOGIC CIRCUIT For〔GC〕area. (P.C.Board:on page 44)


IC801
LV1030
DOLBY
PRO LOGIC
C861 16V10
R808 100K
R835 2.2K
C862 16V10
C852 680P
C808 16V10
R836 2.2K
L801 10μH
C821 16V220
R853 47K
R851 47K
R854 39K
R852 39K
(9V)
D801 MA165TA
D802 MA165TA
R827 3.3K
R826 3.3K
R825 3.3K
C825 100P
C826 100P
C827 33P
C848 0.15
C847 50V3.3
C846 0.15
C845 50V4.7
C844 50V0.47
C843 50V4.7
C842 50V0.47
C841 16V10
C840 16V10
C837 0.1
C851 16V47
C836 50V1
C835 16V47
C834 50V0.47
C833 16V220
C832 0.047
C831 50V0.47
C830 0.082
C829 3300P
C828 0.082
Vcc
VREF
CONTROL
OUT MUTE
PROLOGIC BYPASS SW
INPUT SW
A/D
D/A
CONTROL LOGIC
4K SRAM
7K L.P.F
FIL.
THL
NR
S-TRIM
DEVIDER
NOISE GENERATOR
L.P.F
NOISE FILTER
NOISE CH
VR CONTROL
BALANCE CONTROL
VR
MUTE
C-TRIM
CMODE
VCA
BPF
RECT
P.S.
LOG DIFF
DUAL CONTROL
GND
Vss
VDD
C801 0.15
C802 50V3.3
C803 0.15
C804 50V4.7
C805 50V0.47
C806 50V4.7
C807 50V0.47
C809 50V1
C811 16V33
C812 16V33
C813 16V220
C814 16V10
C815 16V10
C816 16V10
C817 16V10
C818 50V2.2
R819 39K
C820 50V0.33
R822 1K
R823 1M
C824 16V220
X801 (8MHz)
R801 39K
R802 39K
CN801
Lch IN
Rch IN
DPL GND
Lch OUT
Rch OUT
C OUT
S OUT
MUT.GND
HP S
CN802
CLK4
CLK1
DATA
ENABLE
D.GND
+B(3)
-B
+B(1)
To F MAIN CIRCUIT (CP801) on page 33
To F MAIN CIRCUIT (CP802) on page 33

→ : Positive voltage line

⇢ : Negative voltage line

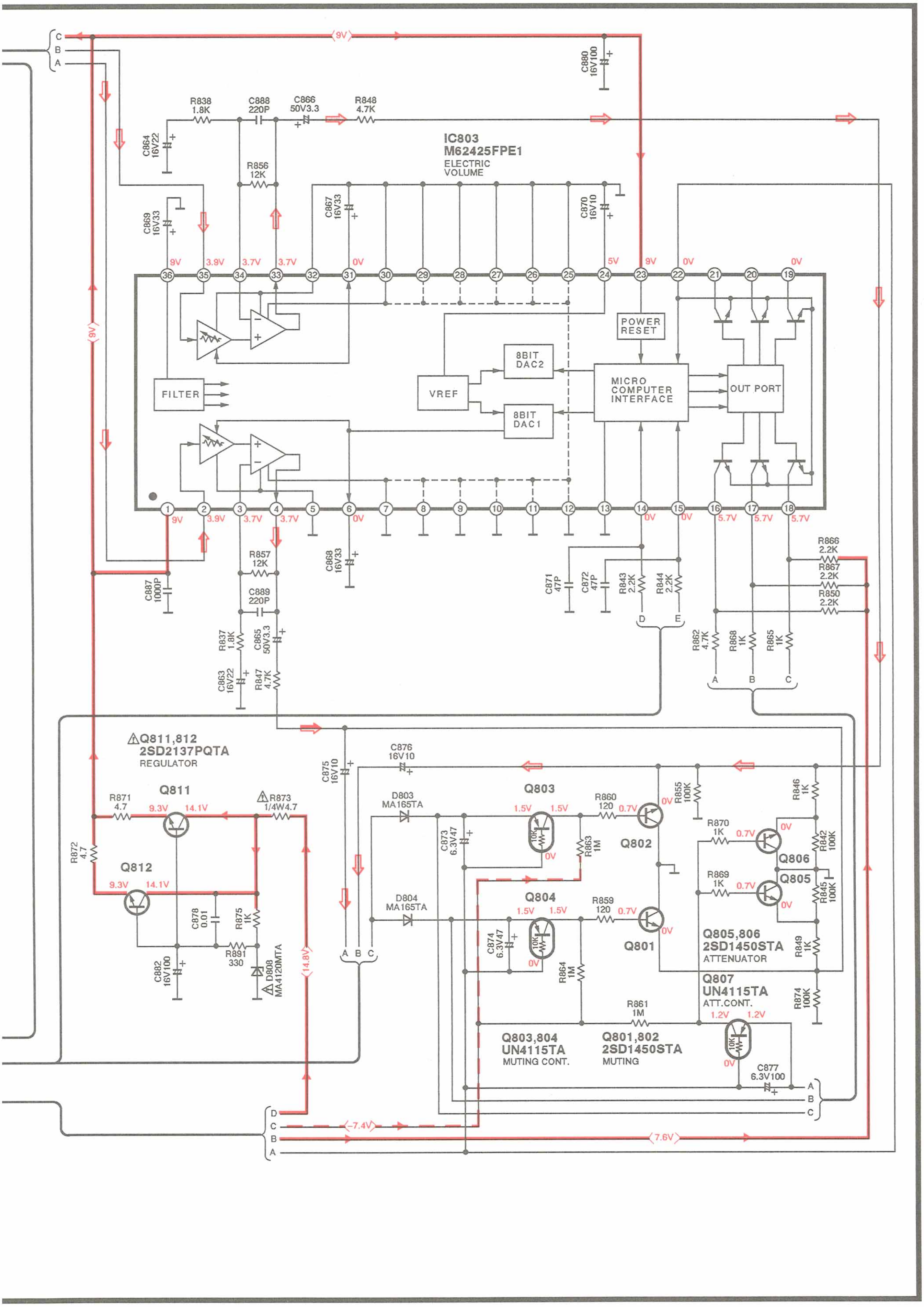
➡ : AM signal Line

⇨ : FM signal line

▭▭▭⇨ : FM OSC signal line

▨ : Surround Speaker Drive signal line

⇨ : Center Speaker Drive signal line


IC803
M62425FPE1
ELECTRIC
VOLUME
R838 1.8K
C888 220P
C866 50V3.3
R848 4.7K
C864 16V22
R856 12K
C869 16V33
C867 16V33
C870 16V10
C880 16V100
9V
3.9V
3.7V
3.7V
0V
5V
9V
0V
0V
POWER RESET
8BIT DAC2
8BIT DAC1
VREF
FILTER
MICRO COMPUTER INTERFACE
OUT PORT
9V
3.9V
3.7V
3.7V
0V
0V
0V
5.7V
5.7V
5.7V
R857 12K
C889 220P
C868 16V33
C887 1000P
R837 1.8K
C865 50V3.3
C863 16V22
R847 4.7K
C871 47P
C872 47P
R843 2.2K
R844 2.2K
D
E
R866 2.2K
R867 2.2K
R850 2.2K
R862 4.7K
R868 1K
R865 1K
A
B
C
⚠Q811,812
2SD2137PQTA
REGULATOR
Q811
R871 4.7
9.3V
14.1V
⚠R873 1/4W4.7
R872 4.7
Q812
9.3V
14.1V
C878 0.01
R875 1K
R891 330
C882 16V100
D808 ⚠MA4120MTA
(14.8V)
C875 16V10
C876 16V10
D803 MA165TA
Q803
1.5V
1.5V
C873 6.3V47
10K
0V
R860 120
0.7V
0V
R855 100K
Q802
R863 1M
R846 1K
R870 1K
0.7V
0V
Q806
R842 100K
R869 1K
0.7V
Q805
0V
R845 100K
D804 MA165TA
Q804
1.5V
1.5V
C874 6.3V47
10K
0V
R859 120
0.7V
0V
Q801
R864 1M
Q805,806
2SD1450STA
ATTENUATOR
R849 1K
Q807
UN4115TA
ATT.CONT.
1.2V
1.2V
R874 100K
R861 1M
Q803,804
UN4115TA
MUTING CONT.
Q801,802
2SD1450STA
MUTING
10K
0V
C877 6.3V100
A
B
C
A B C
(9V)
(9V)
(-7.4V)
(7.6V)
D
C
B
A
C
B
A

→ : Positive voltage line

➡ : AM signal Line

⇢ : Negative voltage line

⇨ : FM signal line

E IN/OUT TERMINAL CIRCUIT (P.C.Board:on page 44)

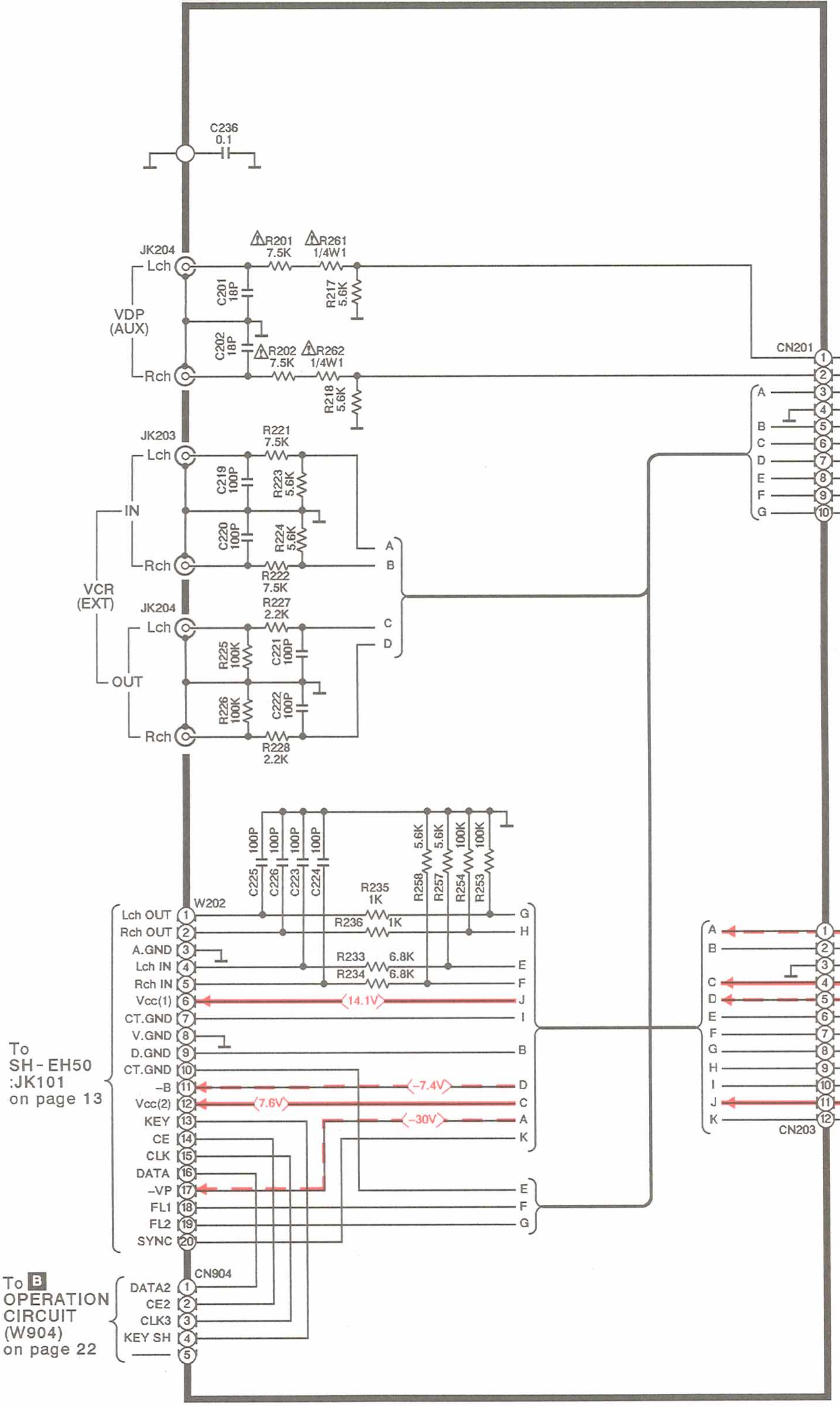
F MAIN CIRCUIT

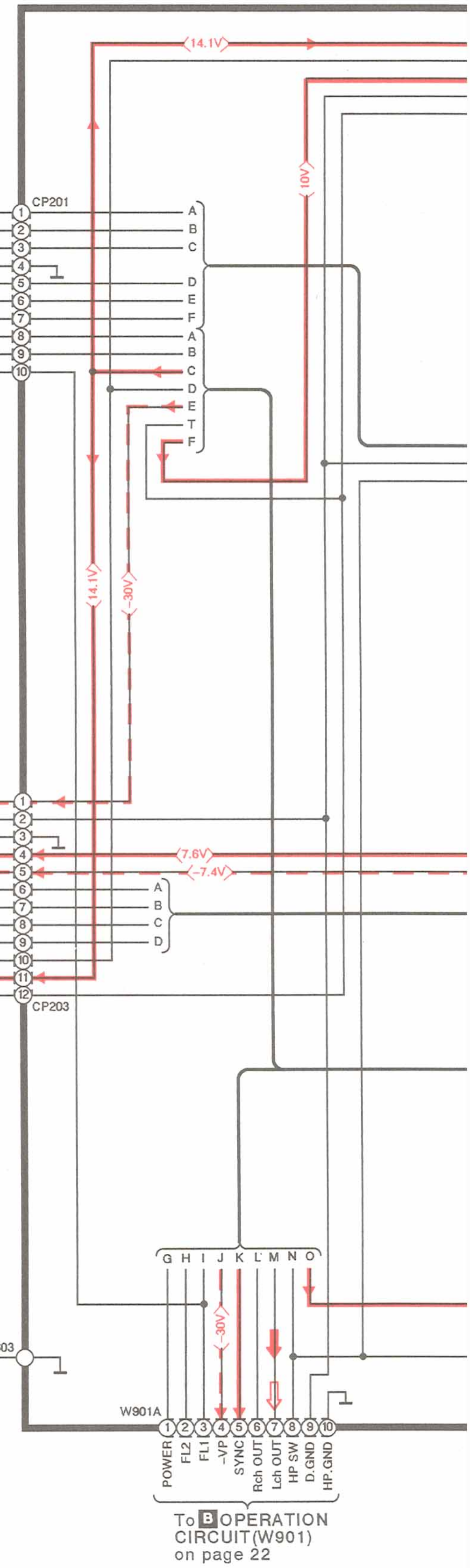
For〔E,EB,EG,EP〕areas.

(P.C.Board:on pages 44 and 45)

For〔GC〕area.

(P.C.Board:on pages 46 and 47)

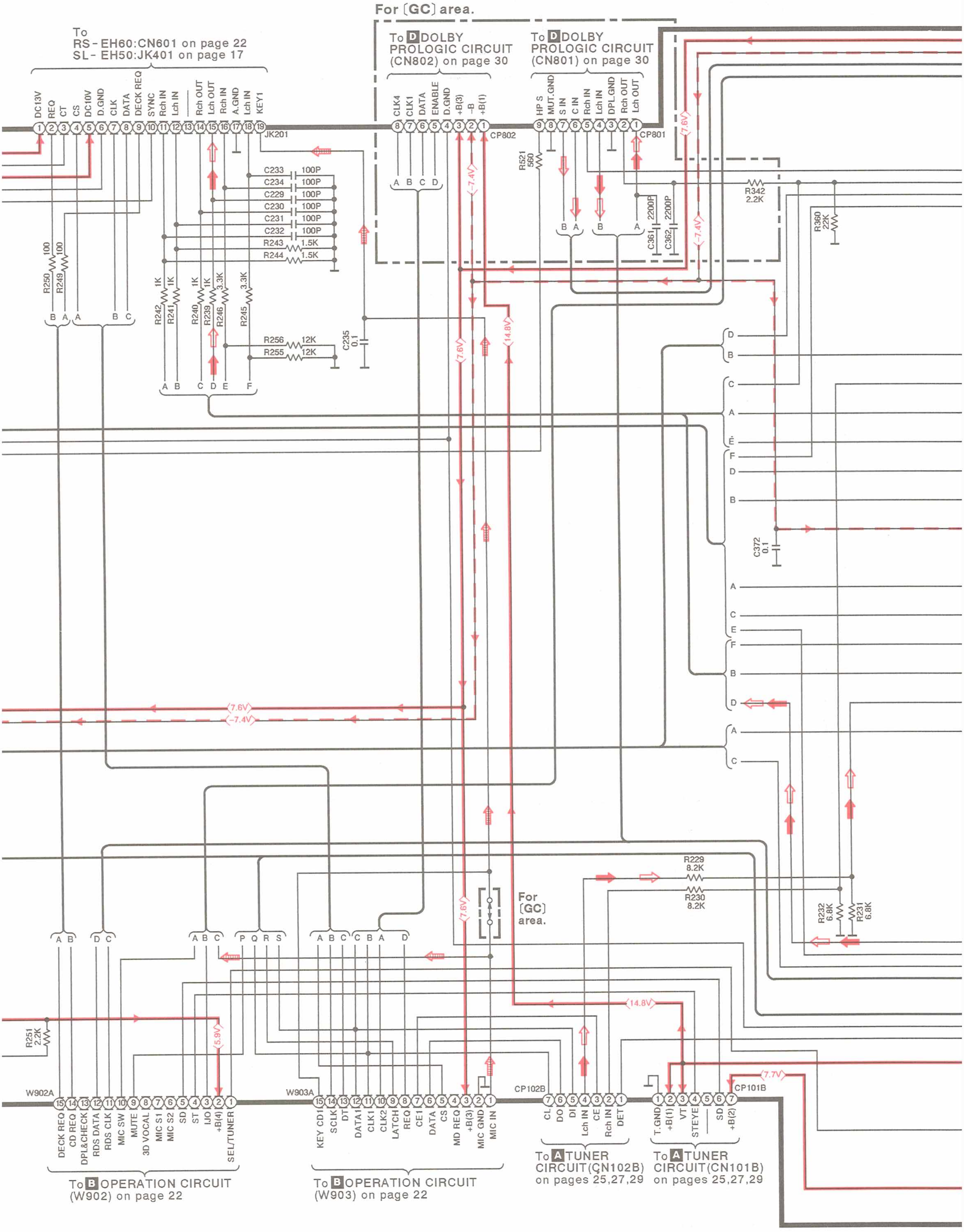

C236
0.1
JK204
Lch
Rch
VDP
(AUX)
R201
7.5K
R261
1/4W1
R217
5.6K
C201
18P
C202
18P
R202
7.5K
R262
1/4W1
R218
5.6K
JK203
IN
R221
7.5K
C219
100P
R223
5.6K
C220
100P
R224
5.6K
R222
7.5K
VCR
(EXT)
JK204
OUT
R227
2.2K
R225
100K
C221
100P
R226
100K
C222
100P
R228
2.2K
CN201
C225 100P
C226 100P
C223 100P
C224 100P
R258 5.6K
R257 5.6K
R254 100K
R253 100K
R235
1K
R236
1K
R233
6.8K
R234
6.8K
W202
Lch OUT
Rch OUT
A.GND
Lch IN
Rch IN
Vcc(1)
CT.GND
V.GND
D.GND
CT.GND
-B
Vcc(2)
KEY
CE
CLK
DATA
-VP
FL1
FL2
SYNC
14.1V
-7.4V
7.6V
-30V
To
SH-EH50
:JK101
on page 13
CN904
DATA2
CE2
CLK3
KEY SH
To B OPERATION
CIRCUIT
(W904)
on page 22


14.1V
10V
CP201
CN203
CP203
14.1V
-30V
7.6V
-7.4V
E603
W901A
POWER
FL2
FL1
-VP
SYNC
Rch OUT
Lch OUT
HP SW
D.GND
HP.GND
-30V
To B OPERATION
CIRCUIT(W901)
on page 22

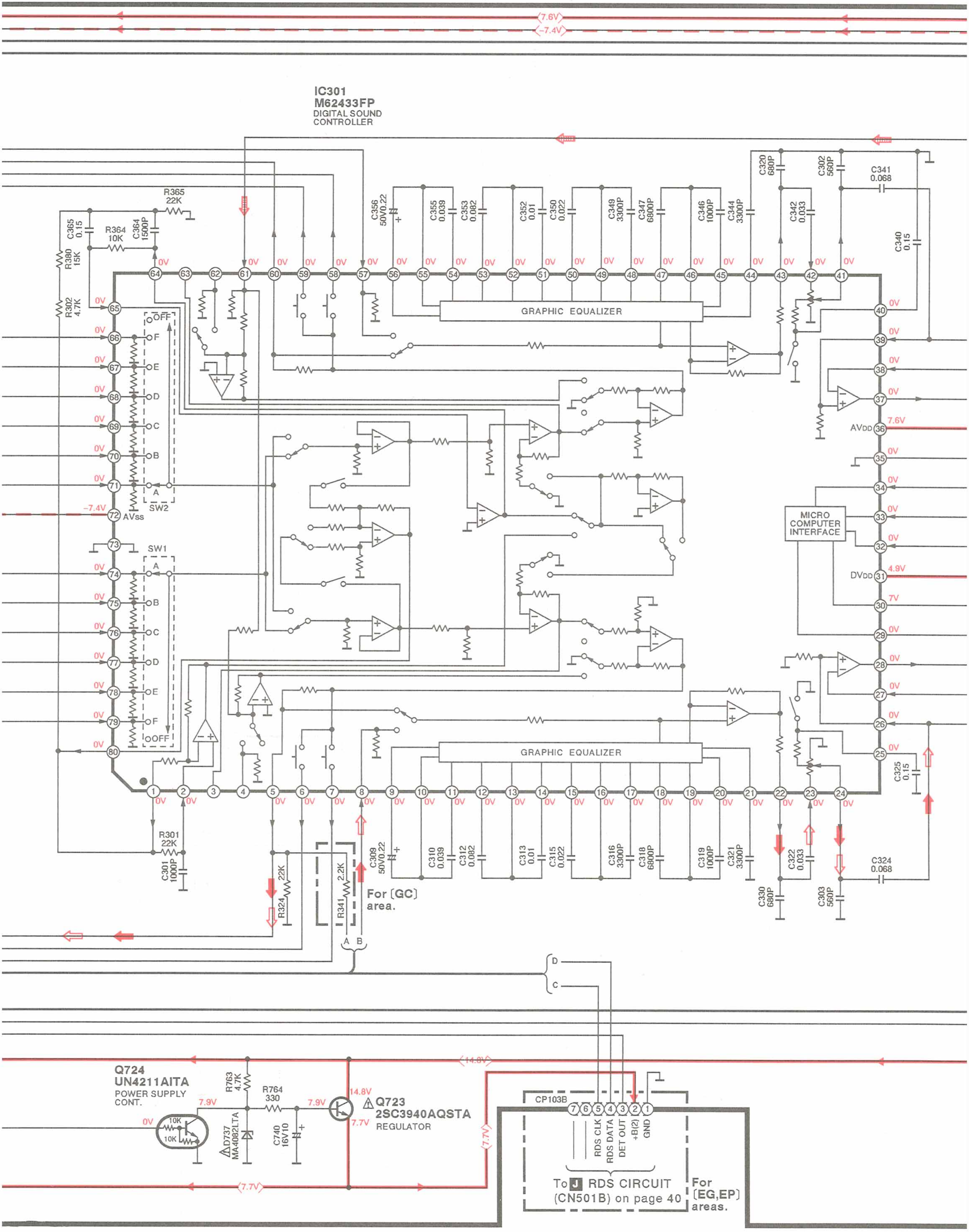
▨ : Surround Speaker Drive signal line

▥ : Mic signal Line

⇨ : Center Speaker Drive signal line


For〔GC〕area.
To RS-EH60:CN601 on page 22
SL-EH50:JK401 on page 17
DC13V
REQ
CT
CS
DC10V
D.GND
CLK
DATA
DECK REQ
SYNC
Rch IN
Lch IN
Rch OUT
Lch OUT
Rch IN
A.GND
Lch IN
KEY1
JK201
C233 100P
C234 100P
C229 100P
C230 100P
C231 100P
C232 100P
R243 1.5K
R244 1.5K
R250 100
R249 100
R242 1K
R241 1K
R240 1K
R239 1K
R246 3.3K
R245 3.3K
R256 12K
R255 12K
C235 0.1
To D DOLBY PROLOGIC CIRCUIT (CN802) on page 30
CLK4
CLK1
DATA
ENABLE
D.GND
+B(3)
-B
+B(1)
CP802
To D DOLBY PROLOGIC CIRCUIT (CN801) on page 30
HP S
MUT.GND
S IN
C IN
Rch IN
Lch IN
DPL.GND
Rch OUT
Lch OUT
CP801
R521 560
C361 2200P
C362 2200P
R342 2.2K
R360 22K
C372 0.1
(7.6V)
(-7.4V)
(14.8V)
(5.9V)
(7.7V)
R229 8.2K
R230 8.2K
R232 6.8K
R231 6.8K
R251 2.2K
For〔GC〕area.
W902A
DECK REQ
CD REQ
DPL&CHECK
RDS DATA
RDS CLK
MIC SW
MUTE
3D VOCAL
MIC S1
MIC S2
SD
ST
IJO
+B(4)
SEL/TUNER
To B OPERATION CIRCUIT (W902) on page 22
W903A
KEY CD1
SCLK
DT
DATA1
CLK1
CLK2
LATCH
REQ
CE1
DATA
CS
MD REQ
+B(3)
MIC GND
MIC IN
To B OPERATION CIRCUIT (W903) on page 22
CP102B
CL
DO
DI
Lch IN
CE
Rch IN
DET
To A TUNER CIRCUIT(CN102B) on pages 25,27,29
CP101B
T.GND
+B(1)
VT
STEYE
SD
+B(2)
To A TUNER CIRCUIT(CN101B) on pages 25,27,29

F MAIN CIRCUIT For 〔E,EB,EG,EP〕 areas. (P.C.Board:on pages 44 and 45) For 〔GC〕 area. (P.C.Board:on pages 46 and 47)


7.6V
−7.4V
IC301
M62433FP
DIGITAL SOUND
CONTROLLER
R365 22K
C365 0.15
R364 10K
C364 1500P
R380 15K
R302 4.7K
C356 50V0.22
C355 0.039
C353 0.082
C352 0.01
C350 0.022
C349 3300P
C347 6800P
C346 1000P
C344 3300P
C320 680P
C342 0.033
C302 560P
C341 0.068
C340 0.15
GRAPHIC EQUALIZER
OFF
F
E
D
C
B
A
SW2
AVss
SW1
OFF
AVDD
MICRO
COMPUTER
INTERFACE
DVDD
7.6V
4.9V
7V
0V
−7.4V
R301 22K
C301 1000P
R324 22K
R341 2.2K
For 〔GC〕 area.
A B
C309 50V0.22
C310 0.039
C312 0.082
C313 0.01
C315 0.022
C316 3300P
C318 6800P
C319 1000P
C321 3300P
C330 680P
C322 0.033
C303 560P
C324 0.068
C325 0.15
D
C
14.8V
Q724
UN4211AITA
POWER SUPPLY
CONT.
7.9V
0V
10K
10K
R763 4.7K
D737 MA4082LTA
R764 330
C740 16V10
7.9V
14.8V
Q723
2SC3940AQSTA
REGULATOR
7.7V
7.7V
7.7V
CP103B
7 6 5 4 3 2 1
RDS CLK
RDS DATA
DET OUT
+B(2)
GND
To J RDS CIRCUIT
(CN501B) on page 40
For 〔EG,EP〕 areas.

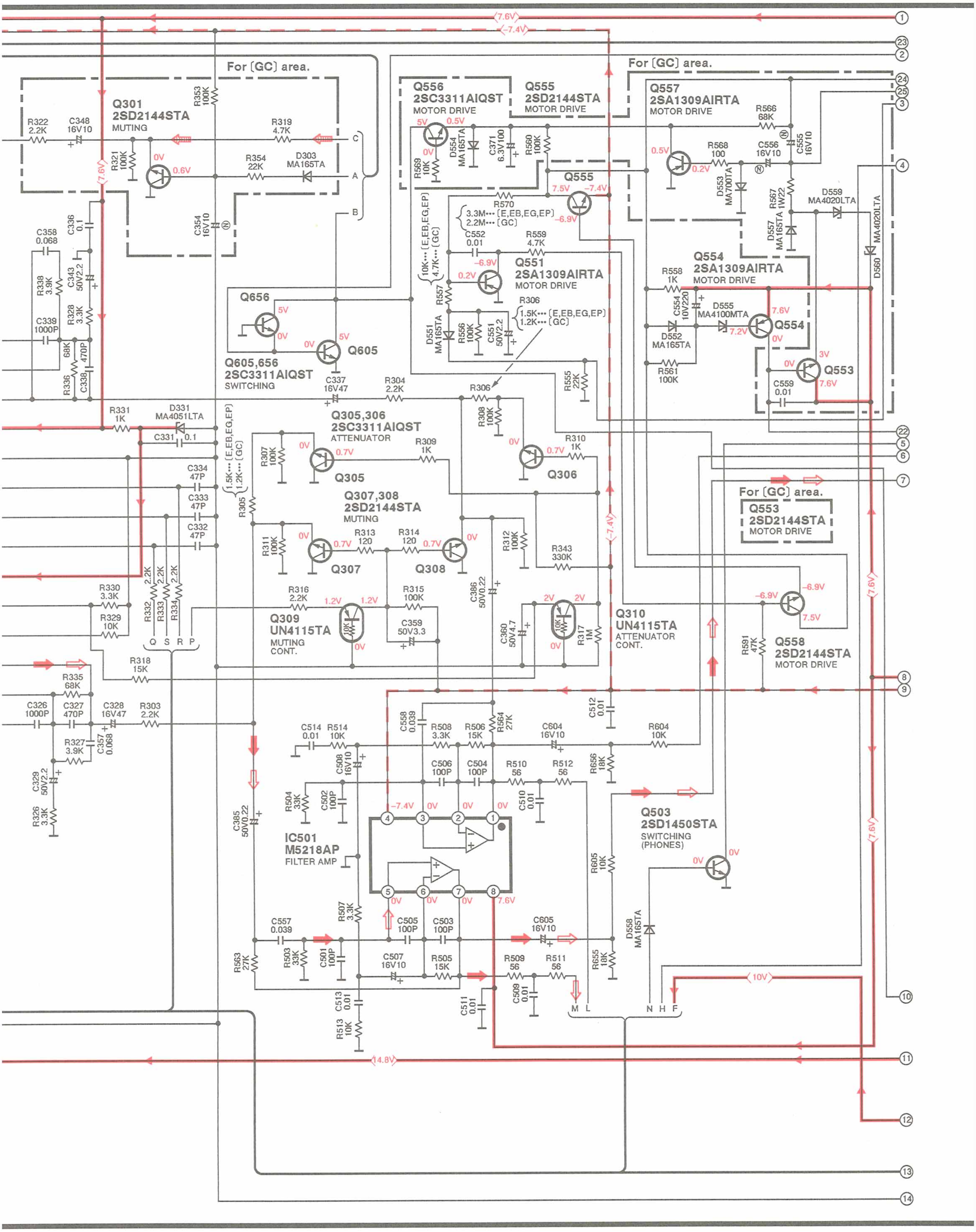
➡ : Positive voltage line

⇢ : Negative voltage line

➡ : AM signal Line

⇨ : FM signal line

⇨ : Mic signal Line


7.6V
-7.4V
For (GC) area.
Q301
2SD2144STA
MUTING
R322 2.2K
C348 16V10
R319 4.7K
R353 100K
R321 100K
0V
0.6V
R354 22K
D303 MA165TA
C
A
B
C354 16V10
C358 0.068
C336 0.1
R338 3.9K
C343 50V2.2
C339 1000P
R328 3.3K
68K
470P
R336
C338
Q656
5V
0V
Q605
Q605,656
2SC3311AIQST
SWITCHING
C337 16V47
R304 2.2K
R331 1K
D331 MA4051LTA
C331 0.1
C334 47P
C333 47P
C332 47P
R330 3.3K
R329 10K
R332 2.2K
R333 2.2K
R334 2.2K
Q S R P
R318 15K
R335 68K
C326 1000P
C327 470P
C328 16V47
R303 2.2K
R327 3.9K
C357 0.068
C329 50V2.2
R326 3.3K
Q556
2SC3311AIQST
MOTOR DRIVE
Q555
2SD2144STA
MOTOR DRIVE
0.5V
R569 10K
D554 MA165TA
C371 6.3V100
R560 100K
7.5V
R570
3.3M··· (E,EB,EG,EP)
2.2M··· (GC)
C552 0.01
R559 4.7K
-6.9V
Q551
2SA1309AIRTA
MOTOR DRIVE
0.2V
10K··· (E,EB,EG,EP)
4.7K··· (GC)
R557
R306
1.5K··· (E,EB,EG,EP)
1.2K··· (GC)
D551 MA165TA
R556 100K
C551 50V2.2
R555 22K
R306
R308 100K
Q305,306
2SC3311AIQST
ATTENUATOR
R307 100K
0.7V
Q305
R309 1K
R310 1K
Q306
1.5K··· (E,EB,EG,EP)
1.2K··· (GC)
R305
Q307,308
2SD2144STA
MUTING
R311 100K
R313 120
R314 120
Q307
Q308
R312 100K
R343 330K
R316 2.2K
1.2V
R315 100K
Q309
UN4115TA
MUTING CONT.
10K
C359 50V3.3
C386 50V0.22
C360 50V4.7
2V
R317 1M
Q310
UN4115TA
ATTENUATOR CONT.
For (GC) area.
Q557
2SA1309AIRTA
MOTOR DRIVE
R566 68K
R568 100
C556 16V10
C555 16V10
D553 MA700TA
R567 1W22
D557 MA165TA
D559 MA4020LTA
MA4020LTA
D560
Q554
2SA1309AIRTA
MOTOR DRIVE
R558 1K
C554 10V220
D555 MA4100MTA
D552 MA165TA
7.6V
7.2V
R561 100K
3V
Q553
C559 0.01
For (GC) area.
Q553
2SD2144STA
MOTOR DRIVE
-6.9V
R591 47K
Q558
2SD2144STA
MOTOR DRIVE
C558 0.039
R564 27K
C514 0.01
R514 10K
R508 3.3K
R506 15K
C604 16V10
C512 0.01
R604 10K
C508 16V10
C506 100P
C504 100P
R510 56
R512 56
R656 18K
R504 33K
C502 100P
C510 0.01
IC501
M5218AP
FILTER AMP
Q503
2SD1450STA
SWITCHING (PHONES)
R605 10K
C385 50V0.22
C557 0.039
R507 3.3K
C505 100P
C503 100P
C605 16V10
D558 MA165TA
R563 27K
R503 33K
C501 100P
C507 16V10
R505 15K
R509 56
R511 56
R655 18K
C513 0.01
R513 10K
C511 0.01
C509 0.01
M L
N H F
10V
14.8V
①
㉓
②
㉔
㉕
③
④
㉒
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭

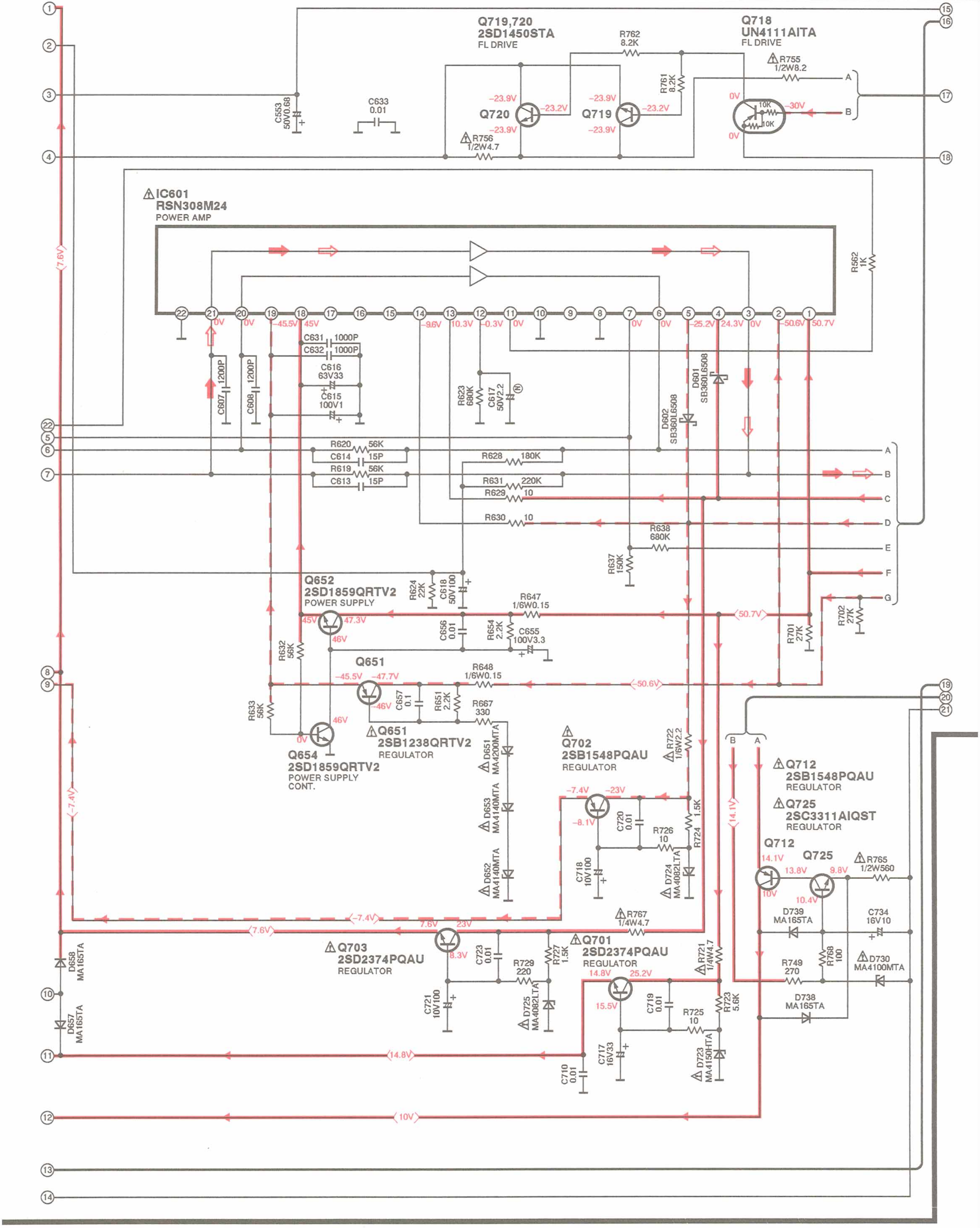
: Positive voltage line

: AM signal Line

: Negative voltage line

: FM signal line

F MAIN CIRCUIT For〔E,EB,EG,EP〕areas. (P.C.Board:on pages 44 and 45)

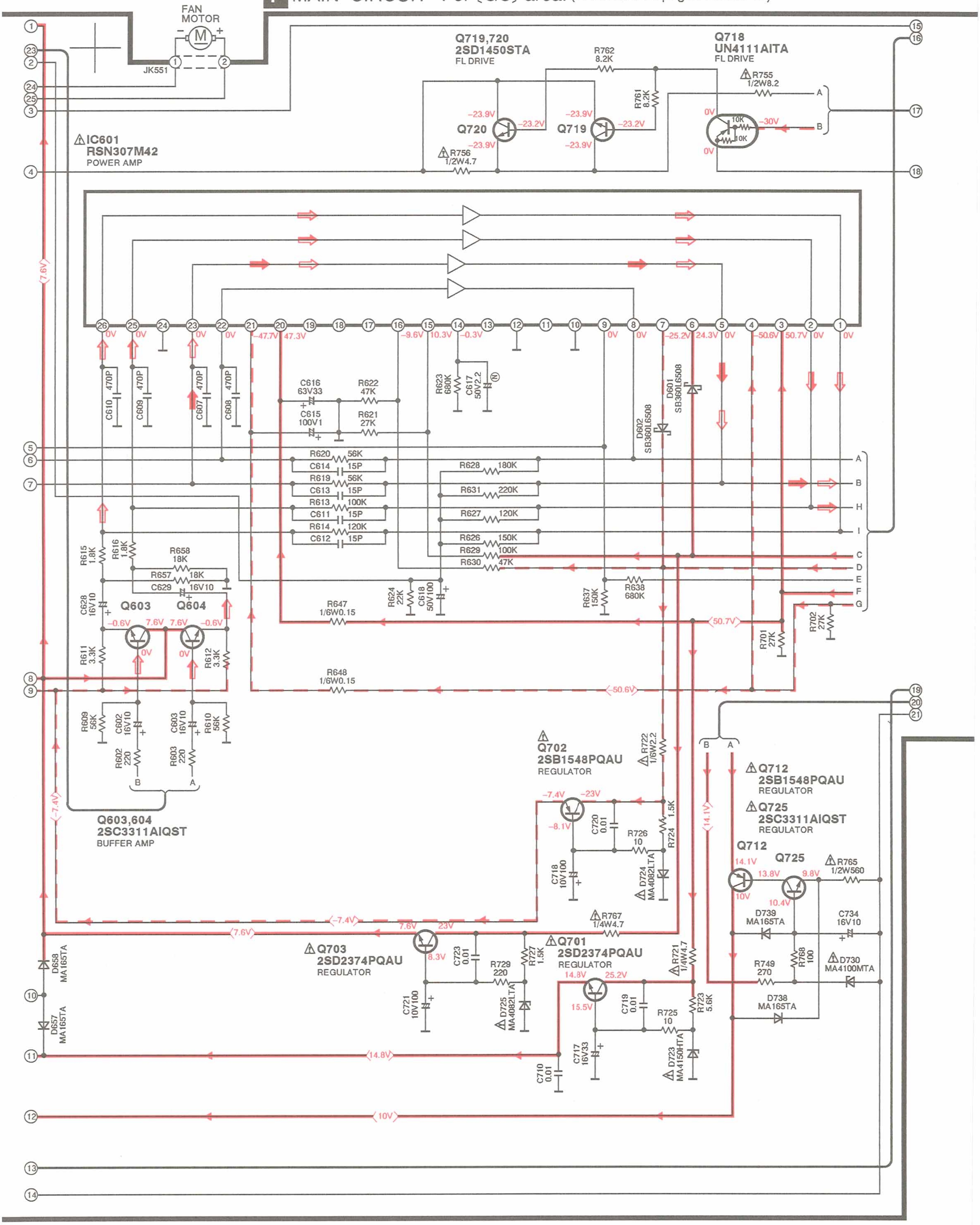

Q719,720
2SD1450STA
FL DRIVE
Q718
UN4111AITA
FL DRIVE
R762 8.2K
R761 8.2K
R755 1/2W8.2
R756 1/2W4.7
C553 50V0.68
C633 0.01
Q720
Q719
-23.9V
-23.2V
0V
-30V
10K
IC601
RSN308M24
POWER AMP
R562 1K
C631 1000P
C632 1000P
C616 63V33
C615 100V1
C607 1200P
C608 1200P
R623 680K
C617 50V2.2
D601 SB360L6508
D602 SB360L6508
R620 56K
C614 15P
R619 56K
C613 15P
R628 180K
R631 220K
R629 10
R630 10
R638 680K
R637 150K
Q652
2SD1859QRTV2
POWER SUPPLY
R624 22K
C618 50V100
R647 1/6W0.15
C656 0.01
R654 2.2K
C655 100V3.3
R702 27K
R701 27K
R632 56K
Q651
R648 1/6W0.15
C657 0.1
R651 2.2K
R667 330
R633 56K
Q654
2SD1859QRTV2
POWER SUPPLY CONT.
Q651
2SB1238QRTV2
REGULATOR
D651 MA4200MTA
D653 MA4140MTA
D652 MA4140MTA
Q702
2SB1548PQAU
REGULATOR
R722 1/6W2.2
C720 0.01
R726 10
R724 1.5K
C718 10V100
D724 MA4082LTA
Q712
2SB1548PQAU
REGULATOR
Q725
2SC3311AIQST
REGULATOR
R765 1/2W560
D739 MA165TA
C734 16V10
R749 270
R768 100
D730 MA4100MTA
D738 MA165TA
R767 1/4W4.7
Q703
2SD2374PQAU
REGULATOR
Q701
2SD2374PQAU
REGULATOR
C723 0.01
R729 220
R727 1.5K
R721 1/4W4.7
C721 10V100
D725 MA4082LTA
C719 0.01
R725 10
R723 5.6K
C717 16V33
C710 0.01
D723 MA4150HTA
D658 MA165TA
D657 MA165TA
-45.5V
45V
-9.6V
10.3V
-0.3V
-25.2V
24.3V
-50.6V
50.7V
47.3V
46V
-47.7V
-7.4V
-23V
-8.1V
7.6V
8.3V
14.8V
25.2V
15.5V
14.1V
13.8V
9.8V
10.4V
10V
(7.6V)
(7.4V)
(14.8V)
(10V)
(14.1V)
(50.7V)
(-50.6V)
(-7.4V)
A
B
C
D
E
F
G
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒

⇨ : Surround Speaker Drive signal line

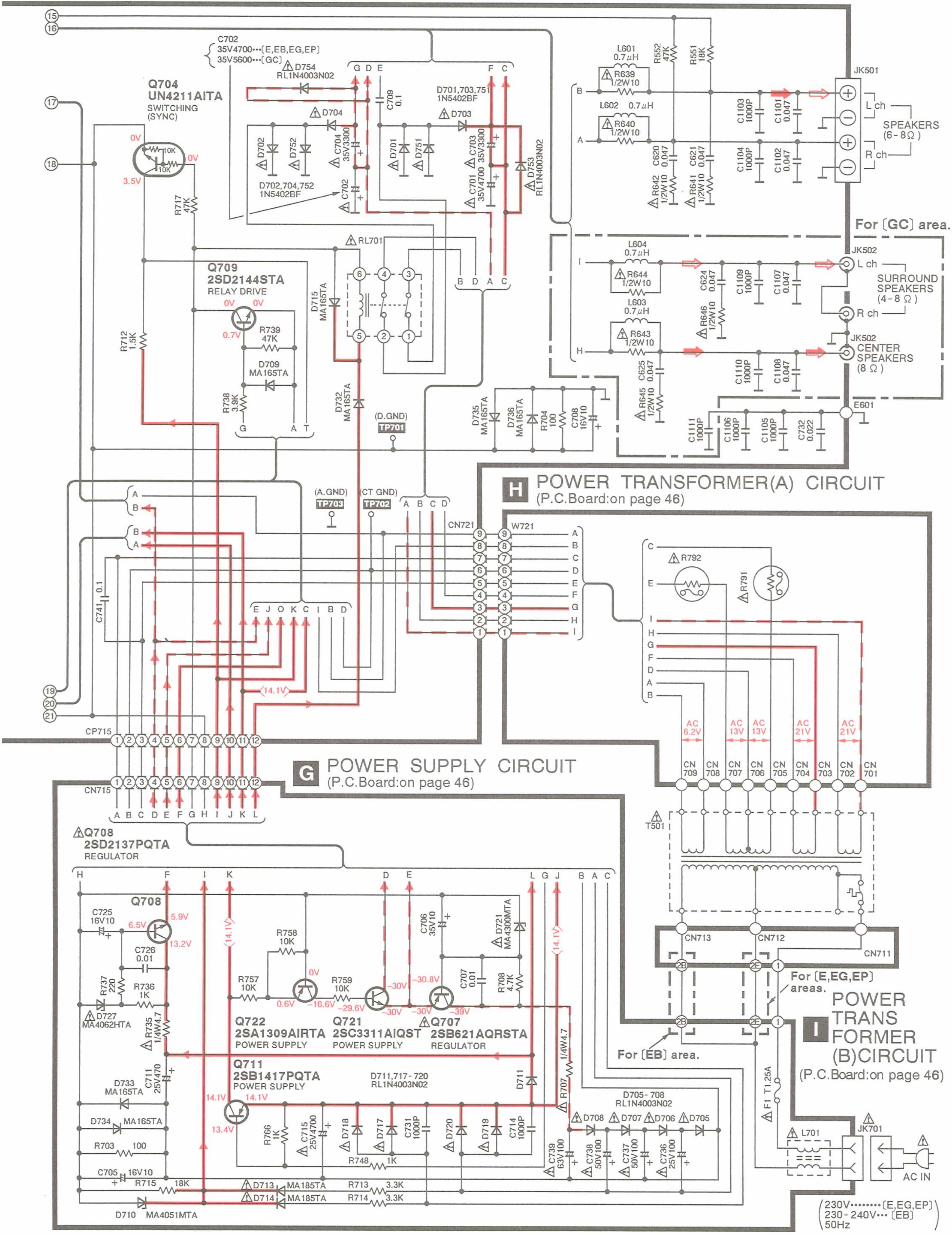
➡ : Center Speaker Drive signal line

⇨ : Mic signal Line

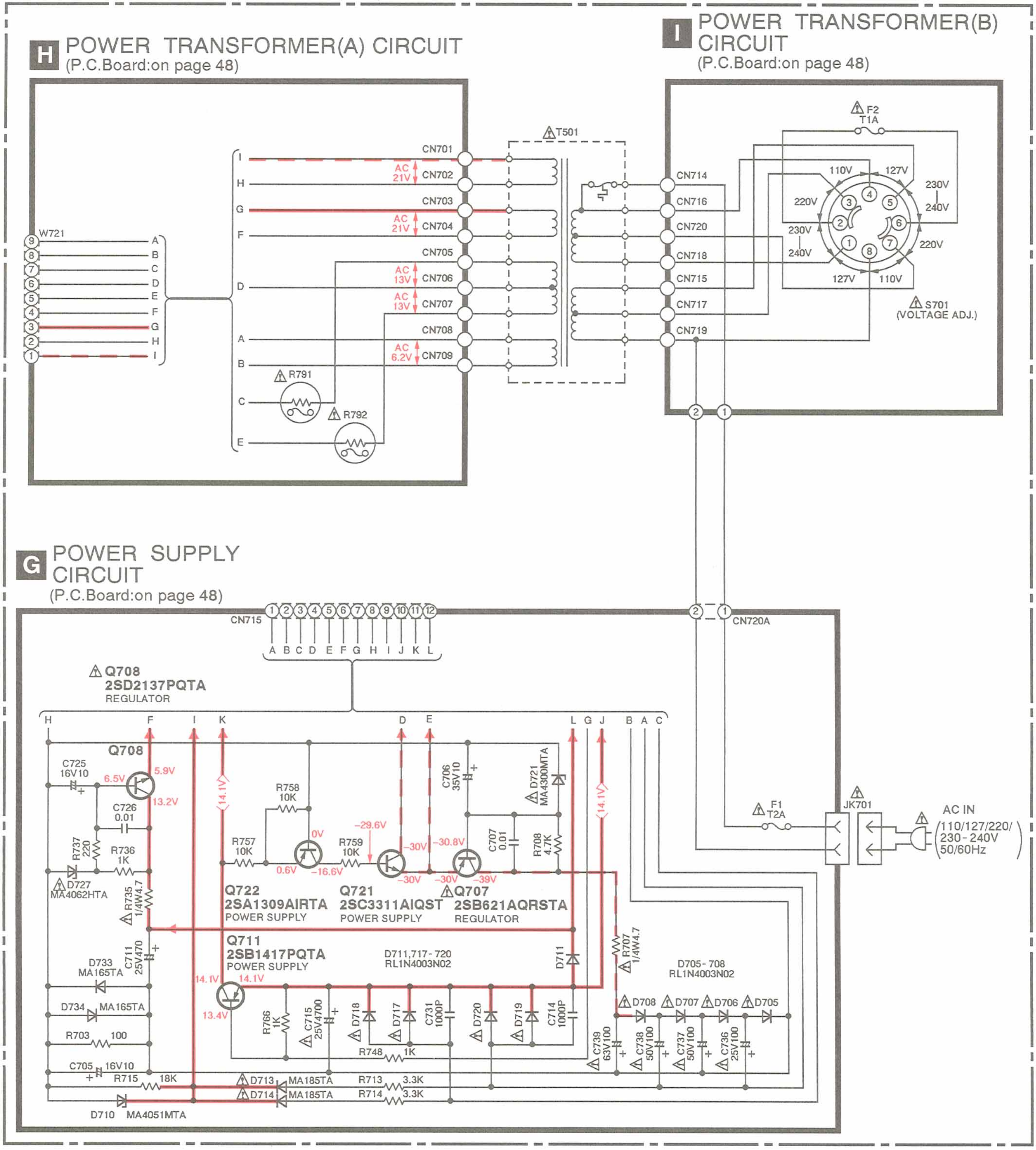
F MAIN CIRCUIT For 〔GC〕 area. (P.C.Board:on pages 46 and 47)


FAN MOTOR
M
JK551
Q719,720
2SD1450STA
FL DRIVE
R762 8.2K
Q718
UN4111AITA
FL DRIVE
R755 1/2W8.2
R761 8.2K
Q720
Q719
-23.9V
-23.2V
R756 1/2W4.7
10K
-30V
0V
IC601
RSN307M42
POWER AMP
C610 470P
C609 470P
C607 470P
C608 470P
C616 63V33
C615 100V1
R622 47K
R621 27K
R623 680K
C617 50V2.2
D601 SB360L6508
D602 SB360L6508
0V
-47.7V
47.3V
-9.6V
10.3V
-0.3V
-25.2V
24.3V
-50.6V
50.7V
R620 56K
C614 15P
R619 56K
C613 15P
R613 100K
C611 15P
R614 120K
C612 15P
R628 180K
R631 220K
R627 120K
R626 150K
R629 100K
R630 47K
R615 1.8K
R616 1.8K
R658 18K
R657 18K
C629 16V10
C628 16V10
Q603
Q604
-0.6V
7.6V
R611 3.3K
R612 3.3K
R624 22K
C618 50V100
R647 1/6W0.15
R648 1/6W0.15
R637 150K
R638 680K
R701 27K
R702 27K
(50.7V)
(-50.6V)
(7.6V)
R609 56K
C602 16V10
C603 16V10
R610 56K
R602 220
R603 220
Q603,604
2SC3311AIQST
BUFFER AMP
Q702
2SB1548PQAU
REGULATOR
R722 1/6W2.2
-7.4V
-23V
-8.1V
C720 0.01
R724 1.5K
R726 10
C718 10V100
D724 MA4082LTA
Q712
2SB1548PQAU
REGULATOR
Q725
2SC3311AIQST
REGULATOR
R765 1/2W560
14.1V
13.8V
9.8V
10V
10.4V
D739 MA165TA
C734 16V10
R749 270
R768 100
D730 MA4100MTA
D738 MA165TA
(14.1V)
(-7.4V)
R767 1/4W4.7
Q703
2SD2374PQAU
REGULATOR
23V
8.3V
C723 0.01
R729 220
R727 1.5K
Q701
2SD2374PQAU
REGULATOR
R721 1/4W4.7
14.8V
25.2V
15.5V
C719 0.01
R725 10
R723 5.6K
C721 10V100
D725 MA4082LTA
C717 16V33
D723 MA4150HTA
C710 0.01
D658 MA165TA
D657 MA165TA
(14.8V)
(10V)
A
B
C
D
E
F
G
H
I

F MAIN CIRCUIT For [E,EB,EG,EP] areas. (P.C.Board:on pages 44 and 45) For [GC] area. (P.C.Board:on pages 46 and 47)


H POWER TRANSFORMER(A) CIRCUIT
(P.C.Board:on page 46)
G POWER SUPPLY CIRCUIT
(P.C.Board:on page 46)
I POWER TRANS FORMER (B)CIRCUIT
(P.C.Board:on page 46)
C702 35V4700…[E,EB,EG,EP] 35V5600…[GC]
D754 RL1N4003N02
Q704 UN4211AITA SWITCHING (SYNC)
10K
0V
3.5V
R717 47K
D704
D702,704,752 1N5402BF
C709 0.1
D701,703,751 1N5402BF
D703
C704 35V3300
C703 35V3300
C701 35V4700
D753 RL1N4003N02
RL701
Q709 2SD2144STA RELAY DRIVE
0.7V
R739 47K
D709 MA165TA
R738 3.9K
R712 1.5K
D715 MA165TA
D732 MA165TA
(D.GND) TP701
D735 MA165TA
D736 MA165TA
R704 100
C708 16V10
(A.GND) TP703
(CT GND) TP702
C741 0.1
(14.1V)
CP715
CN715
CN721
W721
L601 0.7μH
R639 1/2W10
L602 0.7μH
R640 1/2W10
R552 47K
R551 18K
C620 0.047
C621 0.047
R642 1/2W10
R641 1/2W10
C1103 1000P
C1101 0.047
C1104 1000P
C1102 0.047
JK501
L ch
R ch
SPEAKERS (6-8Ω)
For [GC] area.
JK502
L604 0.7μH
R644 1/2W10
L603 0.7μH
R643 1/2W10
C624 0.047
R646 1/2W10
C625 0.047
R645 1/2W10
C1109 1000P
C1107 0.047
C1110 1000P
C1108 0.047
SURROUND SPEAKERS (4-8Ω)
CENTER SPEAKERS (8Ω)
E601
C1111 1000P
C1106 1000P
C1105 1000P
C732 0.022
R792
R791
AC 6.2V
AC 13V
AC 13V
AC 21V
AC 21V
CN 709
CN 708
CN 707
CN 706
CN 705
CN 704
CN 703
CN 702
CN 701
T501
CN713
CN712
CN711
For [E,EG,EP] areas.
For [EB] area.
F1 T1.25A
L701
JK701
AC IN
230V……[E,EG,EP]
230-240V…[EB]
50Hz
Q708 2SD2137PQTA REGULATOR
C725 16V10
6.5V
5.9V
13.2V
C726 0.01
R737 220
R736 1K
D727 MA4062HTA
R735 1/4W4.7
C711 25V470
D733 MA165TA
D734 MA165TA
R703 100
C705 16V10
R715 18K
D710 MA4051MTA
R758 10K
R757 10K
R759 10K
0.6V
-16.6V
-29.6V
-30V
-30.8V
-39V
C706 35V10
C707 0.01
R708 4.7K
D721 MA4300MTA
Q722 2SA1309AIRTA POWER SUPPLY
Q721 2SC3311AIQST POWER SUPPLY
Q707 2SB621AQRSTA REGULATOR
Q711 2SB1417PQTA POWER SUPPLY
14.1V
13.4V
D711,717-720 RL1N4003N02
D711
R707 1/4W4.7
R766 1K
C715 25V4700
D718
D717
C731 1000P
D720
D719
C714 1000P
R748 1K
D713 MA185TA
D714 MA185TA
R713 3.3K
R714 3.3K
D705-708 RL1N4003N02
D708 D707 D706 D705
C739 63V100
C738 50V100
C737 50V100
C736 25V100

POWER SOURCE CIRCUIT For [GC] area.


H
POWER TRANSFORMER(A) CIRCUIT
(P.C.Board:on page 48)
I
POWER TRANSFORMER(B) CIRCUIT
(P.C.Board:on page 48)
W721
9
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
CN701
AC 21V
CN702
CN703
AC 21V
CN704
CN705
AC 13V
CN706
AC 13V
CN707
CN708
AC 6.2V
CN709
R791
R792
T501
CN714
CN716
CN720
CN718
CN715
CN717
CN719
F2
T1A
110V
127V
230V
240V
220V
230V
240V
220V
127V
110V
S701
(VOLTAGE ADJ.)
G
POWER SUPPLY CIRCUIT
(P.C.Board:on page 48)
CN715
CN720A
Q708
2SD2137PQTA
REGULATOR
C725
16V10
6.5V
5.9V
13.2V
C726
0.01
R737
220
R736
1K
D727
MA4062HTA
R735
1/4W4.7
C711
25V470
D733
MA165TA
D734
MA165TA
R703
100
C705
16V10
R715
18K
D710
MA4051MTA
(14.1V)
R758
10K
R757
10K
0V
0.6V
-16.6V
R759
10K
-29.6V
-30V
-30.8V
-30V
-30V
-39V
C706
35V10
D721
MA4300MTA
C707
0.01
R708
4.7K
Q722
2SA1309AIRTA
POWER SUPPLY
Q721
2SC3311AIQST
POWER SUPPLY
Q707
2SB621AQRSTA
REGULATOR
Q711
2SB1417PQTA
POWER SUPPLY
14.1V
14.1V
13.4V
D711,717-720
RL1N4003N02
D711
R707
1/4W4.7
R766
1K
C715
25V4700
D718
D717
C731
1000P
D720
D719
C714
1000P
R748
1K
D713
MA185TA
D714
MA185TA
R713
3.3K
R714
3.3K
D705-708
RL1N4003N02
D708
D707
D706
D705
C739
63V100
C738
50V100
C737
50V100
C736
25V100
F1
T2A
JK701
AC IN
(110/127/220/ 230-240V 50/60Hz)

→ : Positive voltage line

⇢ : Negative voltage line

➡ : AM signal Line

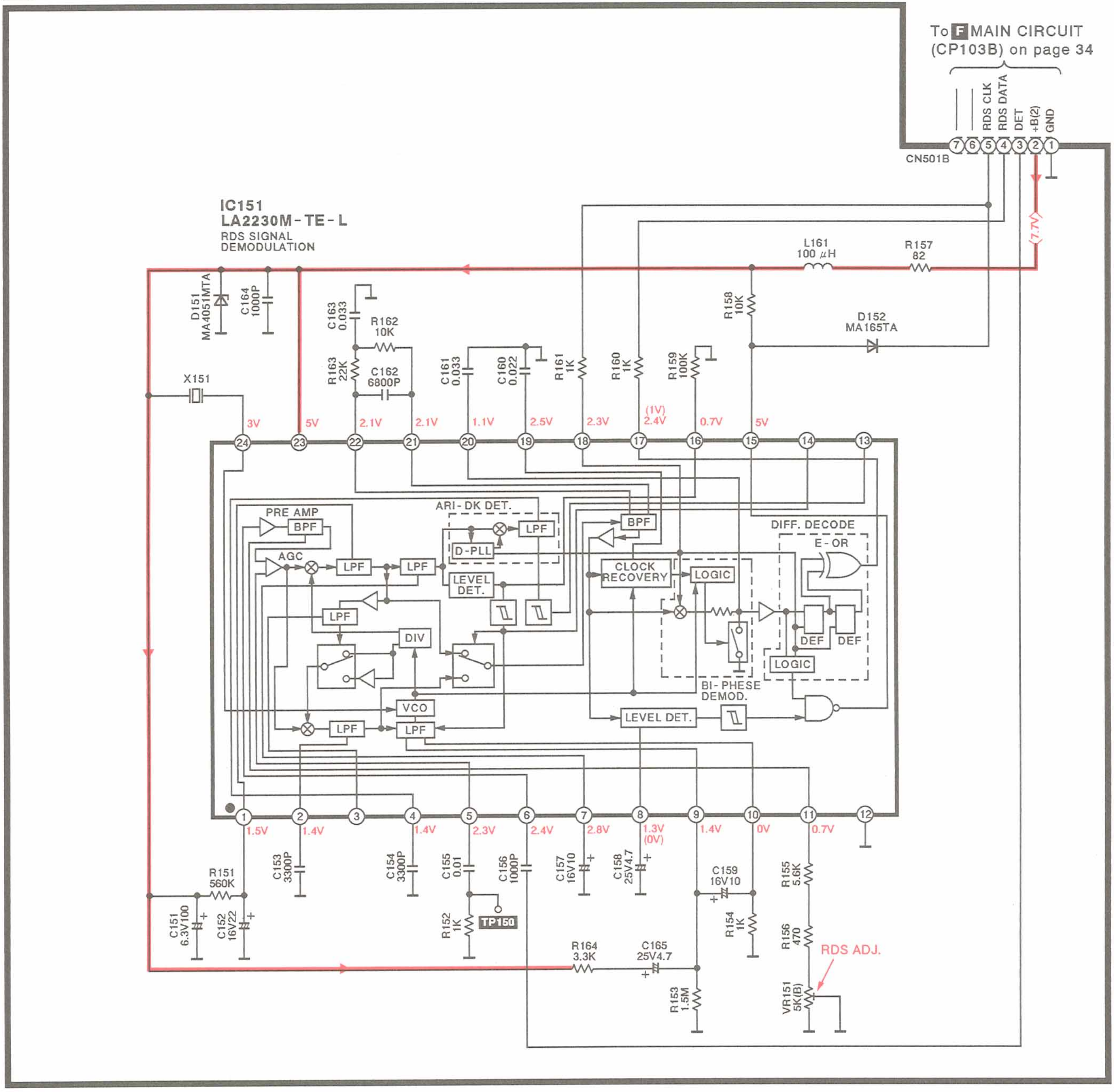
⇨ : FM signal line

▨ : Surround Speaker Drive signal line

⇉ : Center Speaker Drive signal line

▥ : Mic signal Line

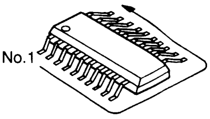
J RDS CIRCUIT For〔EG,EP〕areas. (P.C.Board:on page 46)


To F MAIN CIRCUIT
(CP103B) on page 34
RDS CLK
RDS DATA
DET
+B(2)
GND
7
6
5
4
3
2
1
CN501B
(7.7V)
IC151
LA2230M-TE-L
RDS SIGNAL
DEMODULATION
L161
100 μH
R157
82
D151
MA4051MTA
C164
1000P
C163
0.033
R162
10K
R163
22K
C162
6800P
C161
0.033
C160
0.022
R161
1K
R160
1K
R159
100K
R158
10K
D152
MA165TA
X151
3V
5V
2.1V
2.1V
1.1V
2.5V
2.3V
(1V)
2.4V
0.7V
5V
24
23
22
21
20
19
18
17
16
15
14
13
PRE AMP
BPF
AGC
LPF
LPF
ARI-DK DET.
LPF
D-PLL
LEVEL
DET.
BPF
CLOCK
RECOVERY
LOGIC
DIFF. DECODE
E-OR
DEF
DEF
LOGIC
LPF
DIV
VCO
LPF
LPF
BI-PHESE
DEMOD.
LEVEL DET.
1
2
3
4
5
6
7
8
9
10
11
12
1.5V
1.4V
1.4V
2.3V
2.4V
2.8V
1.3V
(0V)
1.4V
0V
0.7V
R151
560K
C151
6.3V100
C152
16V22
C153
3300P
C154
3300P
C155
0.01
C156
1000P
C157
16V10
C158
25V4.7
C159
16V10
R155
5.6K
R152
1K
TP150
R154
1K
R156
470
RDS ADJ.
R164
3.3K
C165
25V4.7
R153
1.5M
VR151
5K(B)

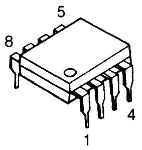
→ : Positive voltage line

■ Type Illustration of IC's, Transistors and Diodes

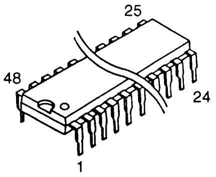
BU9255FS-E2	16PIN
LA1832MH-TEL	24PIN
LA2230M-TE-L	24PIN
LC7218M-TE-L	24PIN
M62425FPE1	36PIN



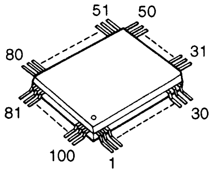
M5218AP



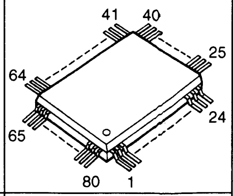
LV1030



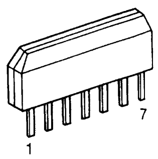
M38198MC097F
M38198MC099F


51
50
80
31
81
30
100
1

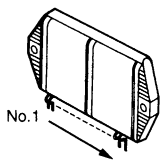
M62433FP


41
40
25
64
24
65
80
1

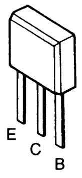
TA2011S



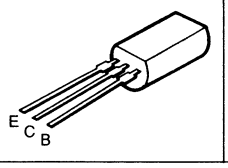
RSN308M24	22PIN
RSN307M42	26PIN



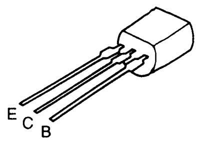
2SA1309AIRTA
2SC2787LTA
2SC2785FETA
2SC3311AIQST
2SC3311ARSTA
2SD1450STA
UN411FTA
UN4111AITA
UN4115TA
UN4211AITA
UN4214AITA



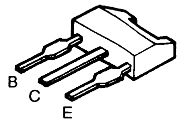
2SC3940AQSTA



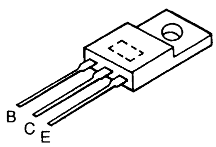
2SB621AQRSTA



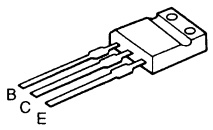
2SB1238QRTV2
2SD1859QRTV2



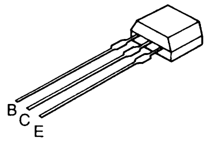
2SB1548PQAU
2SD2374PQAU



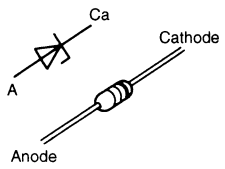
2SB1417PQTA
2SD2137PQTA



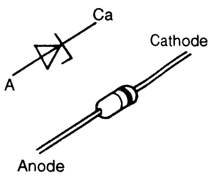
2SD2144STA



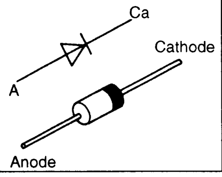
MA4020LTA
MA4039MTA
MA4051LTA
MA4051MTA
MA4062HTA
MA4082LTA


Ca
Cathode
A
Anode

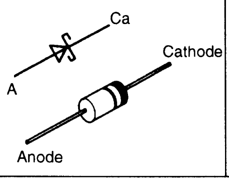
MA4100MTA
MA4120MTA
MA4140MTA
MA4150HTA
MA4200MTA
MA4300MTA


Ca
Cathode
A
Anode

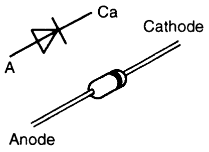
1N5402BF
RL1N4003N02


Ca
Cathode
A
Anode

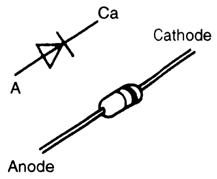
SB360L6508


Ca
Cathode
A
Anode

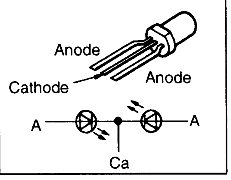
MA165TA
MA700TA
1SS291TA


Ca
Cathode
A
Anode

MA185TA


Ca
Cathode
A
Anode

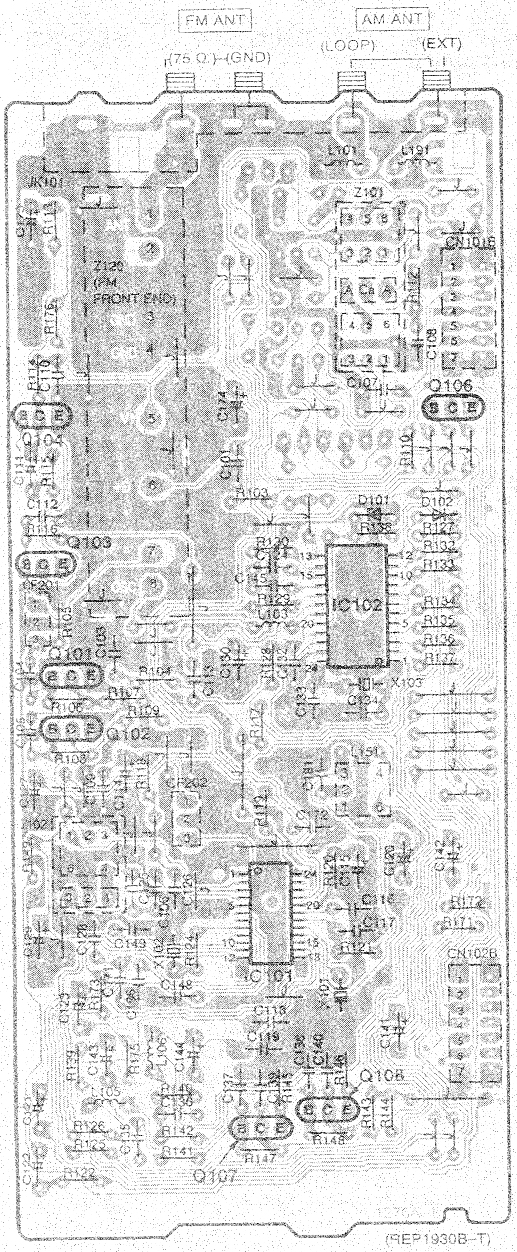
SPR505MDTT


Anode
Cathode
Anode
A
A
Ca

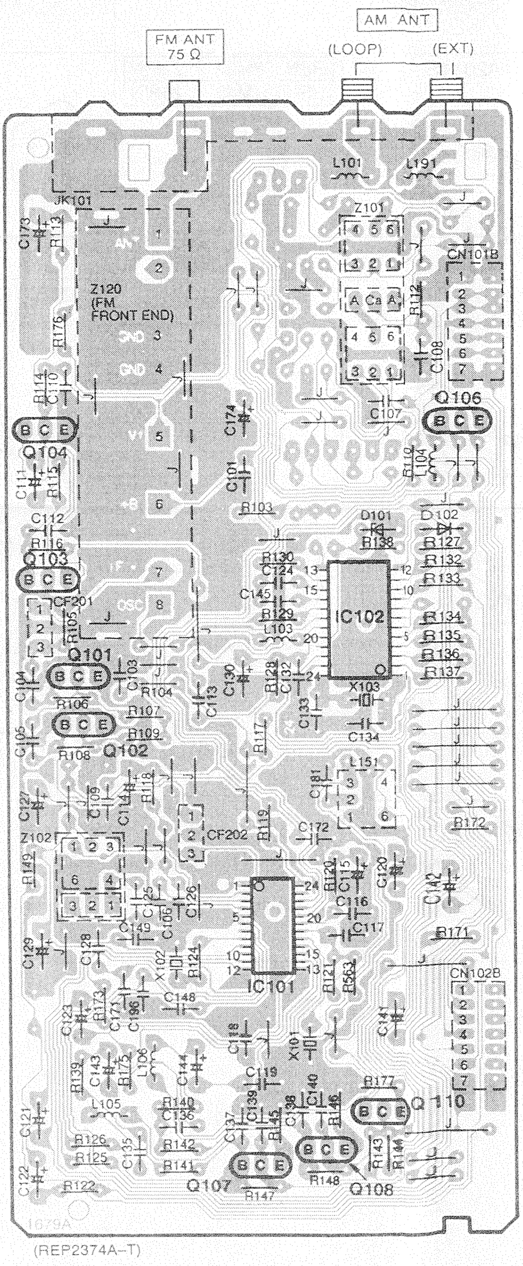
■ Printed Circuit Board Diagram

- This circuit board diagram may be modified at any time with the development of new technology.

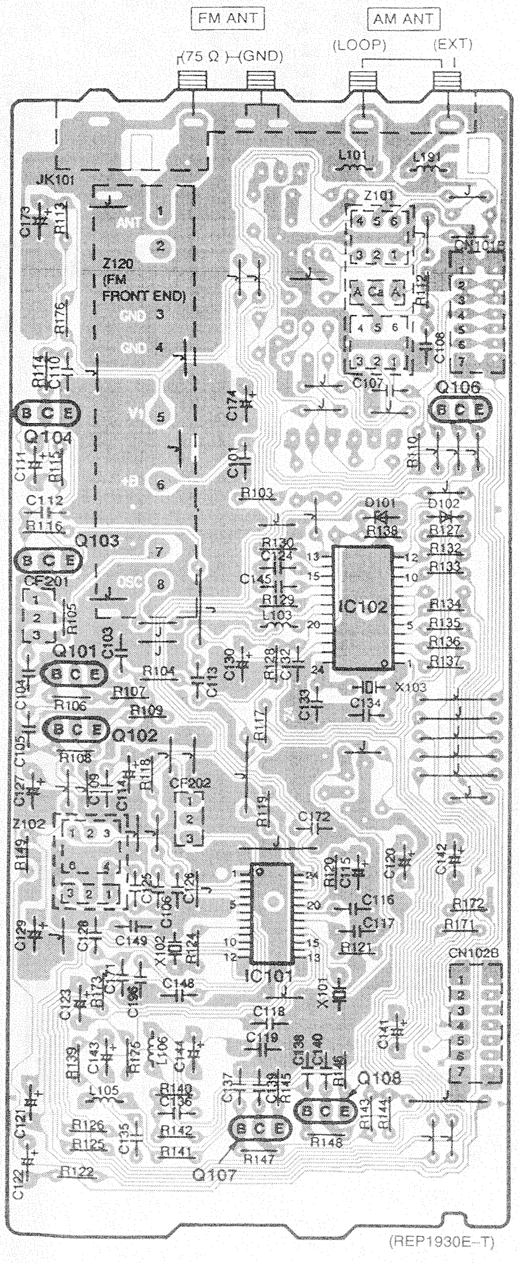
A TUNER P.C.B. For [E,EB] areas.


FM ANT
(75 Ω)
(GND)
AM ANT
(LOOP)
(EXT)
JK101
L101
L191
Z101
CN101B
Z120
(FM
FRONT END)
ANT
GND
VI
+B
OSC
Q104
Q103
Q101
Q102
Q106
Q107
Q108
IC102
IC101
D101
D102
CF201
CF202
Z102
X101
X102
X103
L103
L105
L106
L151
CN102B
(REP1930B-T)

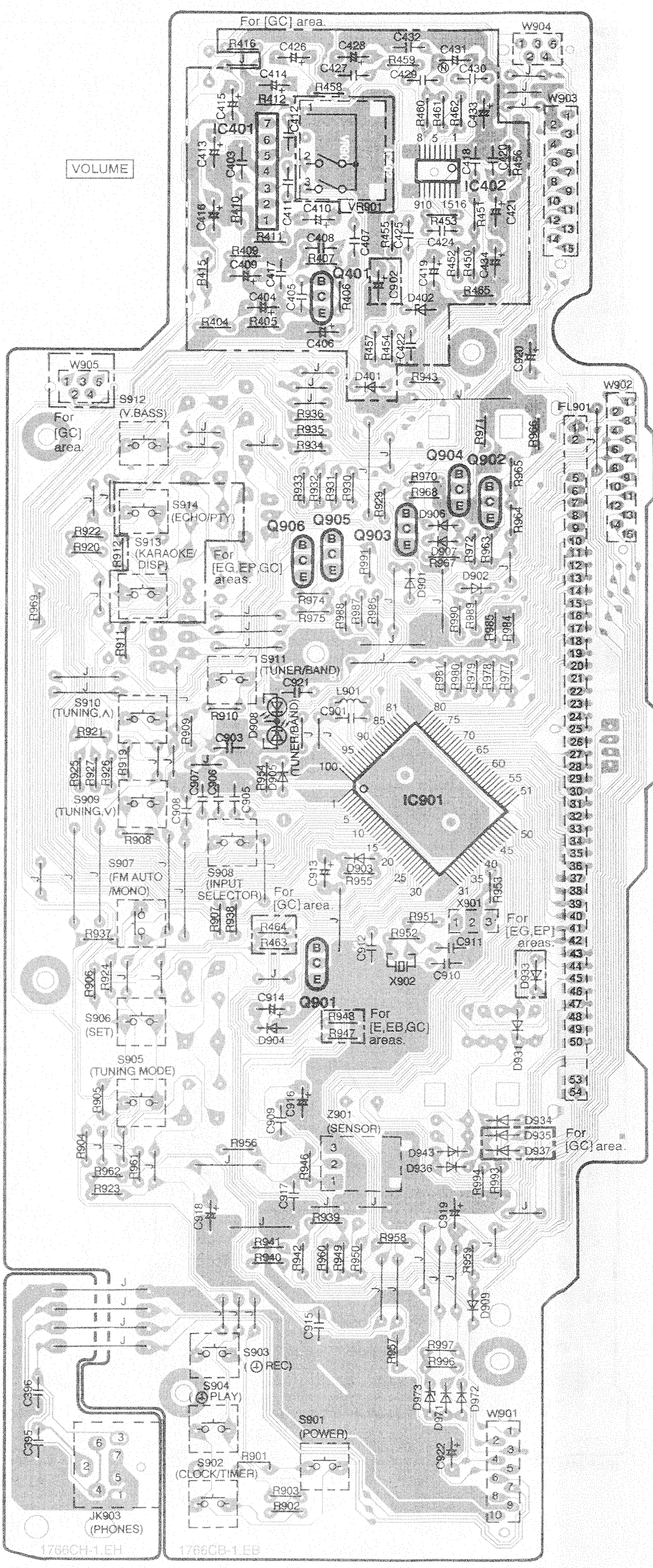
A TUNER P.C.B. For [EG,EP] areas.


FM ANT
75 Ω
AM ANT
(LOOP)
(EXT)
JK101
L101
L191
Z101
CN101B
Z120
(FM
FRONT END)
ANT
GND
VI
+B
OSC
Q104
Q103
Q101
Q102
Q106
Q107
Q108
Q110
IC102
IC101
D101
D102
CF201
CF202
Z102
X101
X102
X103
L103
L104
L105
L106
L151
CN102B
(REP2374A-T)

A TUNER P.C.B. For [GC] area.

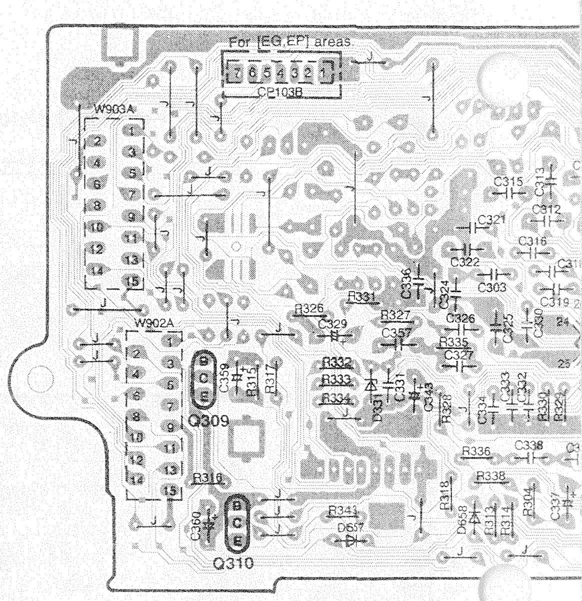

FM ANT
AM ANT
(75 Ω) (GND)
(LOOP)
(EXT)
JK101
Z120 (FM FRONT END)
ANT
GND
VT
+B
OSC
Z101
CN101B
Q104
Q103
Q101
Q102
Q106
Q107
Q108
IC102
IC101
CF201
CF202
Z102
X102
X103
X101
L101
L191
L103
L105
L106
D101
D102
CN102B
(REP1930E–T)

B OPERATION P.C.B.

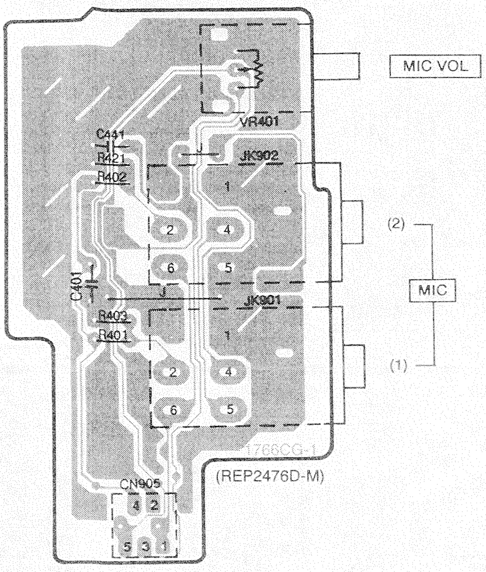

For [GC] area.
VOLUME
W904
W903
W905
W902
W901
IC401
IC402
VR901
Q401
D401
D402
S912 (V.BASS)
For [GC] area.
S914 (ECHO/PTY)
S913 (KARAOKE/DISP)
For [EG,EP,GC] areas.
Q904
Q902
Q906
Q905
Q903
S911 (TUNER/BAND)
S910 (TUNING,∧)
S909 (TUNING,∨)
D908 (TUNER/BAND)
L901
IC901
FL901
S907 (FM AUTO /MONO)
S908 (INPUT SELECTOR)
For [GC] area.
X901
X902
For [EG,EP] areas.
Q901
For [E,EB,GC] areas.
S906 (SET)
S905 (TUNING MODE)
Z901 (SENSOR)
For [GC] area.
S903 (REC)
S904 (PLAY)
S901 (POWER)
S902 (CLOCK/TIMER)
JK903 (PHONES)
1766CH-1.EH
1766CB-1.EB

REP2476B-M ••• [E]
REP2476C-M ••• [EB]
REP2476D-M ••• [GC]
REP2476F-M ••• [EG,EP]

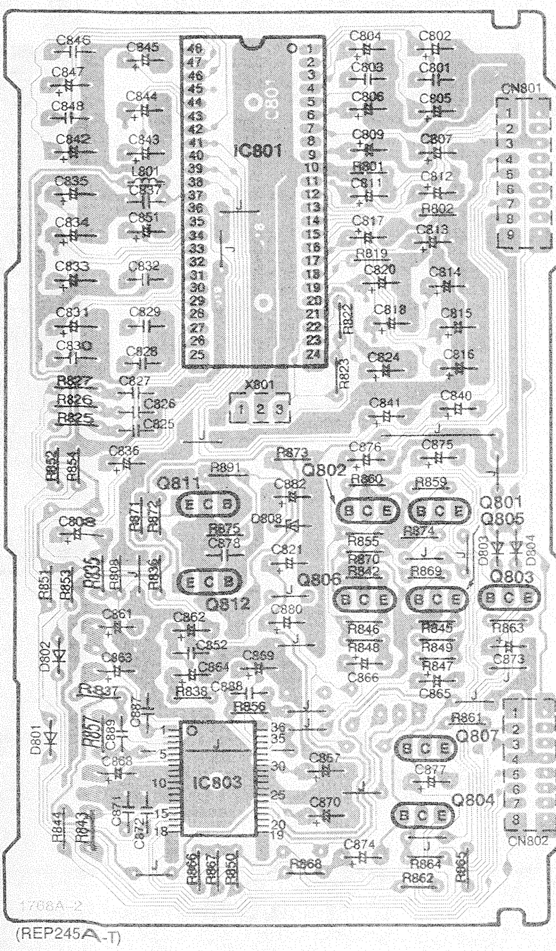
F MAIN P.C.B. For [E,EB,EG,EP] areas.


For [EG,EP] areas.
CP103B
W903A
W902A
Q309
Q310
C315
C312
C321
C316
C322
C303
C319
R326
C329
R331
C336
C324
R327
C357
C326
C325
C330
R335
C327
C359
R315
R317
R332
R333
R334
D331
C331
C343
R328
C334
C333
C332
R330
R329
R316
C360
R336
C338
R338
R318
D658
R313
R314
R304
C337
R341
D657

C MIC JACK P.C.B. For [GC] area.

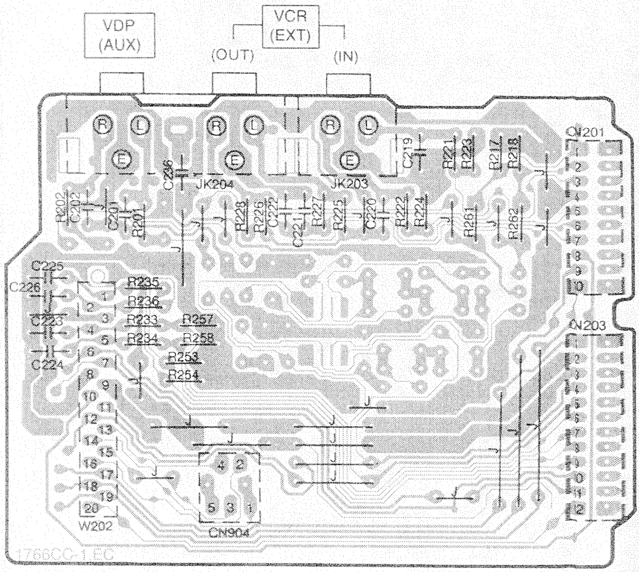

MIC VOL
VR401
C441
R421
R402
JK902
(2)
MIC
C401
R403
R401
JK901
(1)
1766CG-1
(REP2476D-M)
CN905

D DOLBY PROLOGIC P.C.B. For [GC] area.


IC801
IC803
X801
CN801
CN802
Q801
Q802
Q803
Q804
Q805
Q806
Q807
Q811
Q812
D801
D802
D803
D804
D808
1768A-2
(REP245A-T)

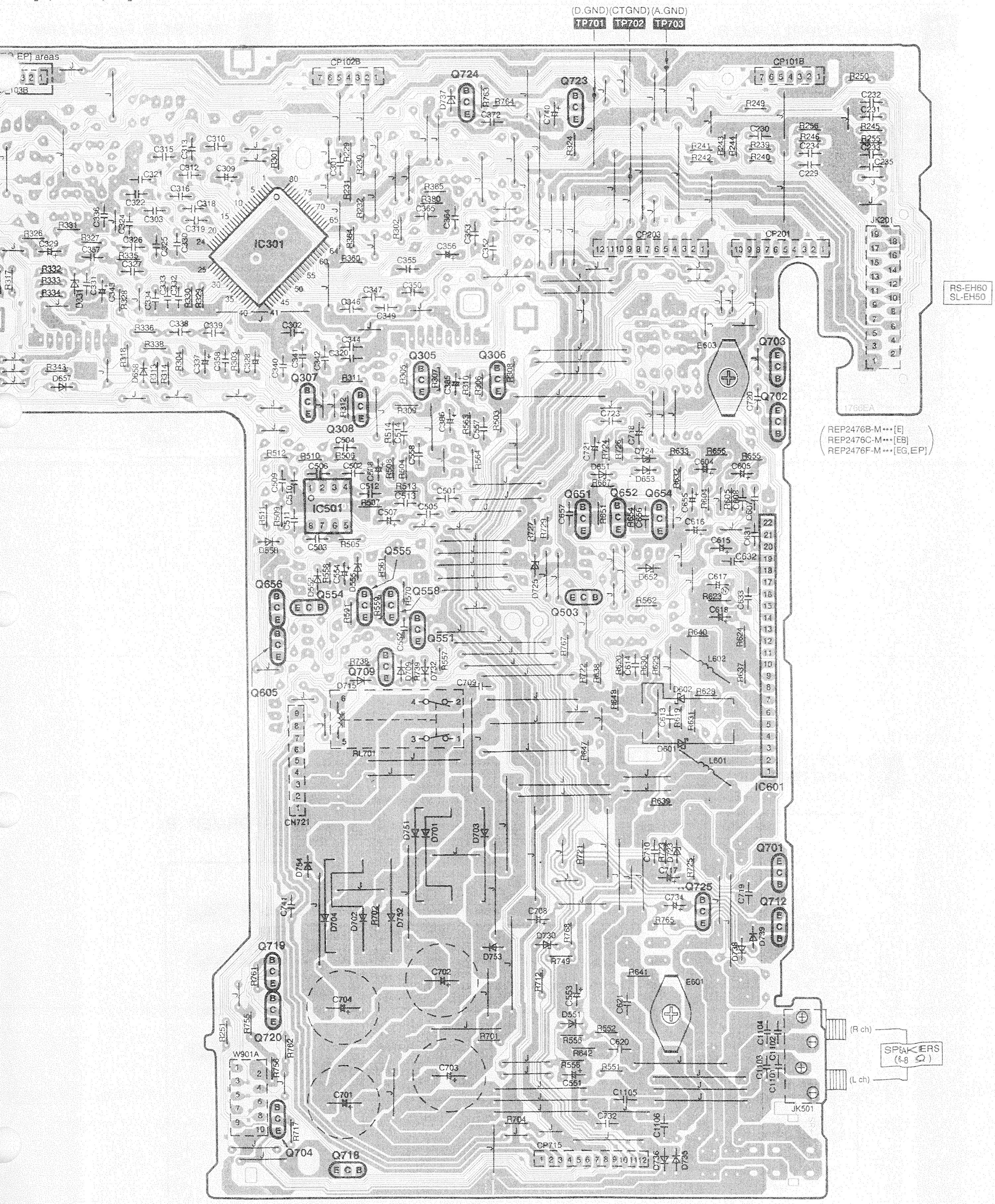
SH-EH50

E IN/OUT TERMINAL P.C.B.

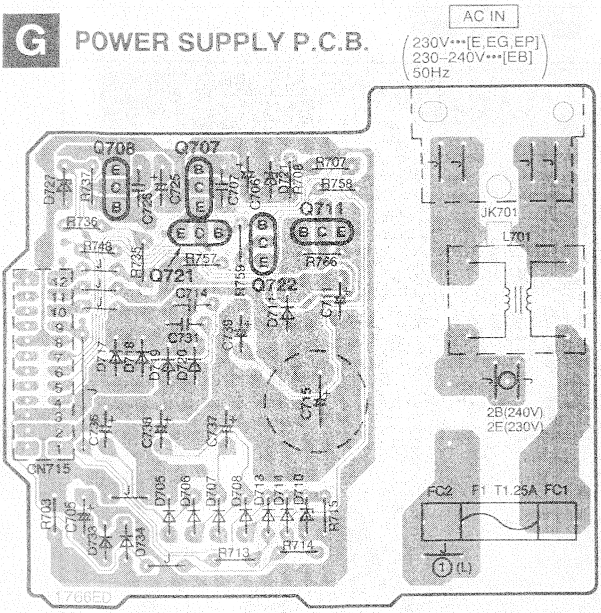

VDP
(AUX)
VCR
(EXT)
(OUT)
(IN)
JK204
JK203
CN201
CN203
W202
CN904
1766CG-1 EG

(REP2476B-M···[E]
REP2476C-M···[EB]
REP2476D-M···[GC]
REP2476F-M···[EG,EP])

For [E,EB,EG,EP] areas.

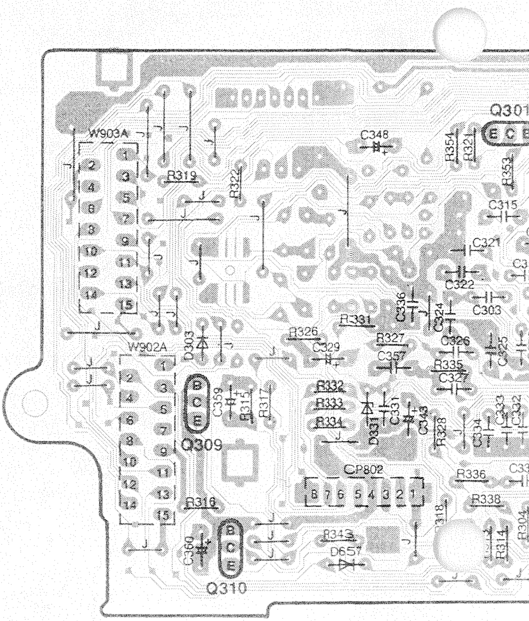

(D.GND) (CTGND) (A.GND)
TP701 TP702 TP703
EP] areas
CP102B
CP101B
IC301
IC501
IC601
JK201
CP203
CP201
E603
E601
CN721
RL701
W901A
CP715
JK501
RS-EH60
SL-EH60
REP2476B-M••• [E]
REP2476C-M••• [EB]
REP2476F-M••• [EG,EP]
(R ch)
(L ch)
SPEAKERS (6-8 Ω)

G POWER SUPPLY P.C.B.

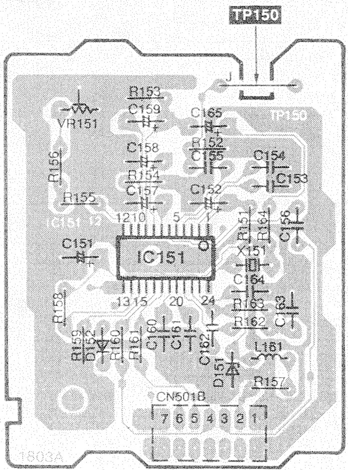

AC IN
230V•••[E,EG,EP]
230–240V•••[EB]
50Hz
Q708
Q707
Q711
Q721
Q722
JK701
L701
2B(240V)
2E(230V)
FC2
F1 T1.25A
FC1
① (L)
CN715
C715
1766ED

REP2476B-M•••[E]
REP2476C-M•••[EB]
REP2476F-M•••[EG,EP]

F MAIN P.C.B. For [GC] area.


Q301
W903A
W902A
Q309
Q310
CP802
D657

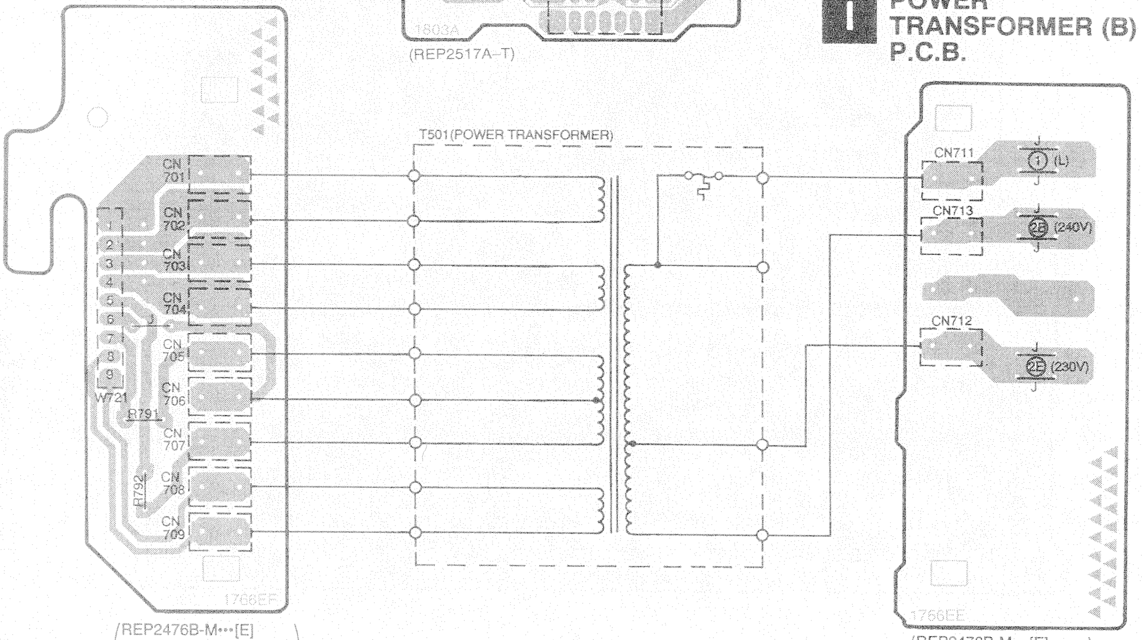
J RDS P.C.B.
For [EG,EP] areas.


TP150
VR151
IC151
X151
L161
CN501B
7 6 5 4 3 2 1
1603A

(REP2517A–T)

H POWER TRANSFORMER (A) P.C.B.

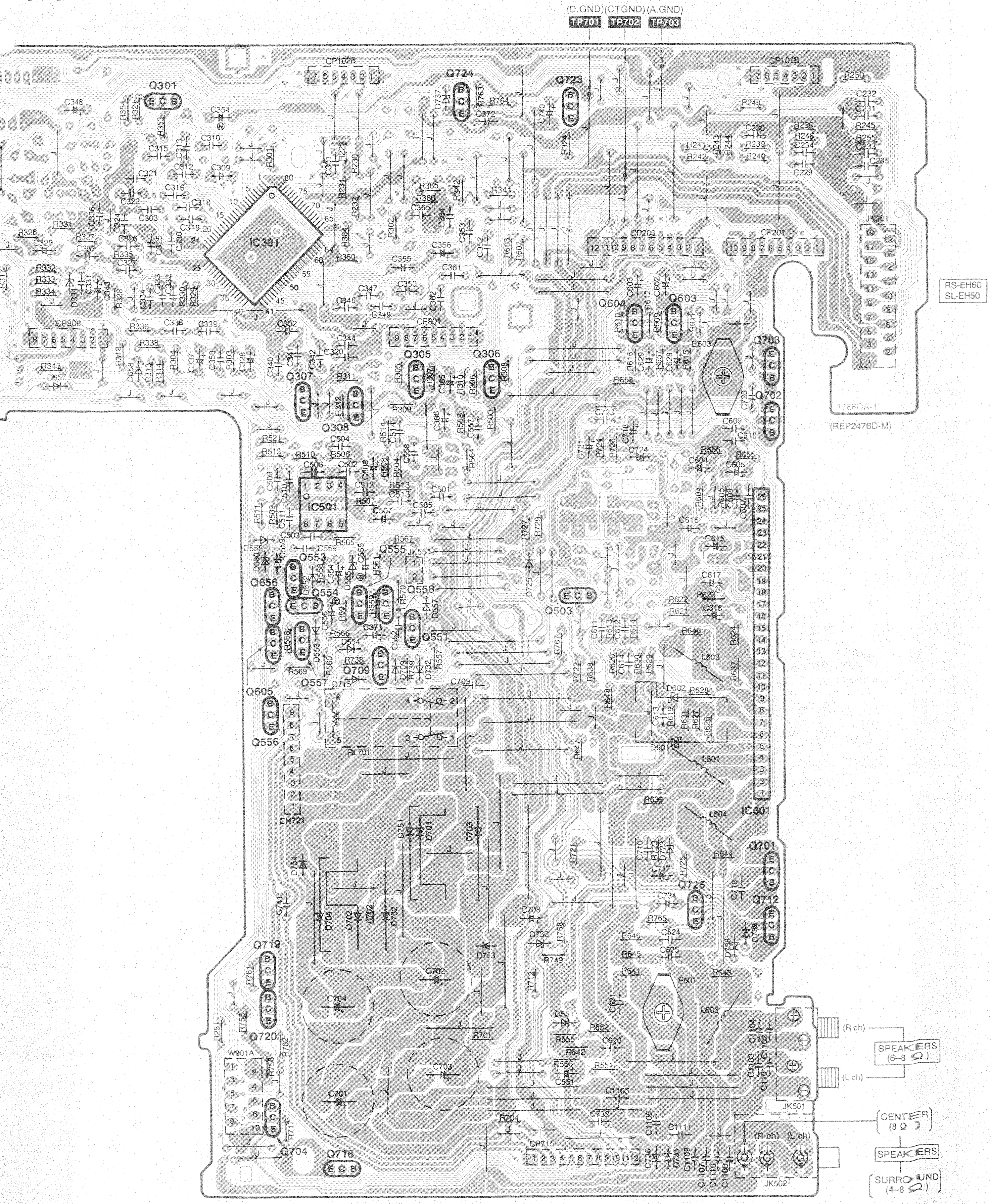
I POWER TRANSFORMER (B) P.C.B.


CN 701
CN 702
CN 703
CN 704
CN 705
CN 706
CN 707
CN 708
CN 709
W721
R791
R792
1766EF
T501(POWER TRANSFORMER)
CN711
① (L)
CN713
2B (240V)
CN712
2E (230V)
1766EE

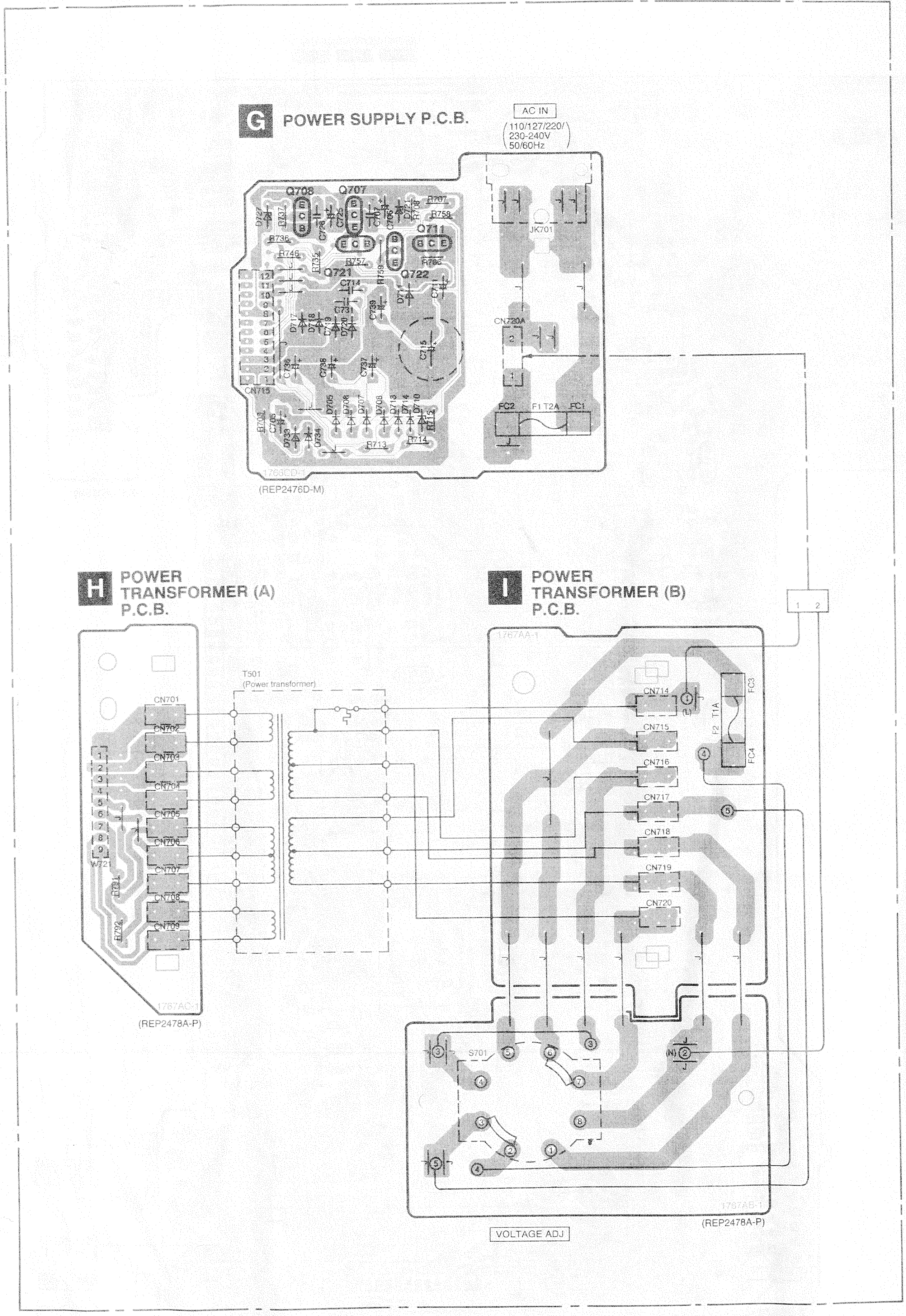
REP2476B-M•••[E]
REP2476C-M•••[EB]
REP2476F-M•••[EG,EP]

REP2476B-M•••[E]
REP2476C-M•••[EB]
REP2476F-M•••[EG,EP]

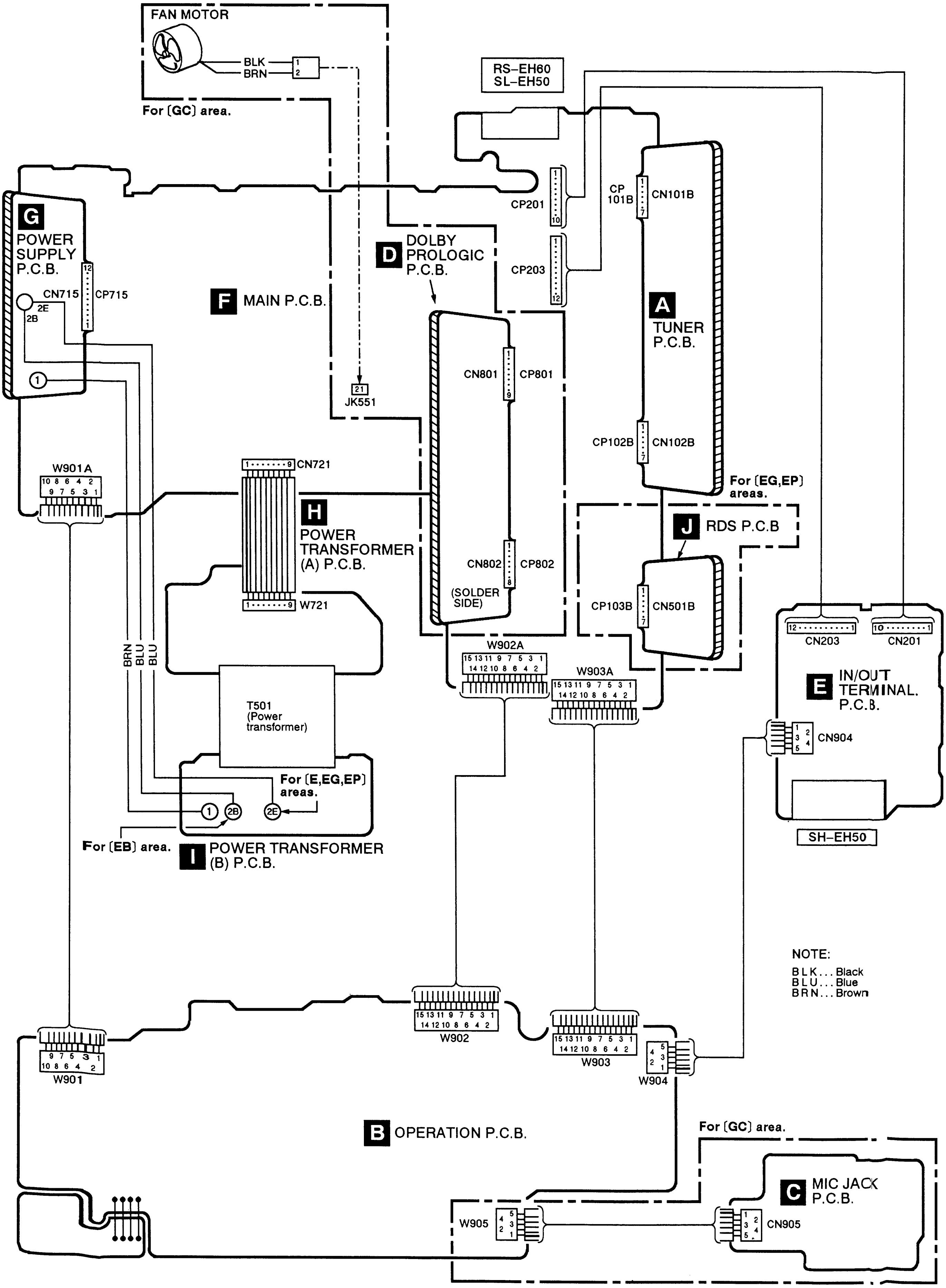
For [GC] area.


(D.GND)(CTGND)(A.GND)
TP701
TP702
TP703
CP102B
CP101B
Q301
Q724
Q723
IC301
CP203
CP201
JK201
RS-EH60
SL-EH50
CP802
CP801
Q604
Q603
Q305
Q306
Q307
Q308
Q703
Q702
E603
1766CA-1
(REP2476D-M)
IC501
Q553
Q555
Q656
Q554
Q558
Q503
Q551
Q709
Q557
Q605
Q556
RL701
CN721
IC601
L602
L601
L604
Q701
Q725
Q712
Q719
Q720
W901A
E601
L603
JK501
(R ch)
(L ch)
SPEAKERS
(6–8 Ω)
CENTER
(8 Ω)
SPEAKERS
SURROUND
(4–8 Ω)
CP715
JK502
Q704
Q718

POWER SOURCE P.C.B. For [GC] area.


G POWER SUPPLY P.C.B.
AC IN
(110/127/220/230-240V 50/60Hz)
JK701
CN720A
FC2 F1 T2A FC1
Q708 Q707 Q711 Q721 Q722
CN715
1766CD-1
(REP2476D-M)
H POWER TRANSFORMER (A) P.C.B.
CN701 CN702 CN703 CN704 CN705 CN706 CN707 CN708 CN709
W721
R791 R792
1767AC-1
(REP2478A-P)
T501 (Power transformer)
I POWER TRANSFORMER (B) P.C.B.
1767AA-1
CN714 CN715 CN716 CN717 CN718 CN719 CN720
FC3 F2 T1A FC4
(L)
(N)
S701
1767AB-1
(REP2478A-P)
VOLTAGE ADJ

■ Wiring Connection Diagram


FAN MOTOR
BLK
BRN
1
2
For [GC] area.
RS-EH60
SL-EH50
G
POWER SUPPLY P.C.B.
CN715
CP715
2E
2B
①
12
1
CP201
10
CP203
12
CP 101B
CN101B
7
D
DOLBY PROLOGIC P.C.B.
F
MAIN P.C.B.
21
JK551
CN801
CP801
9
A
TUNER P.C.B.
CP102B
CN102B
For [EG,EP] areas.
W901A
10 8 6 4 2
9 7 5 3 1
CN721
W721
H
POWER TRANSFORMER (A) P.C.B.
CN802
CP802
8
(SOLDER SIDE)
J
RDS P.C.B
CP103B
CN501B
CN203
CN201
E
IN/OUT TERMINAL. P.C.B.
W902A
15 13 11 9 7 5 3 1
14 12 10 8 6 4 2
W903A
CN904
BRN
BLU
BLU
T501 (Power transformer)
For [E,EG,EP] areas.
①
2B
2E
For [EB] area.
I
POWER TRANSFORMER (B) P.C.B.
SH-EH50
W901
W902
W903
W904
B
OPERATION P.C.B.
For [GC] area.
C
MIC JACK P.C.B.
W905
CN905

NOTE:
BLK... Black
BLU... Blue
BRN... Brown

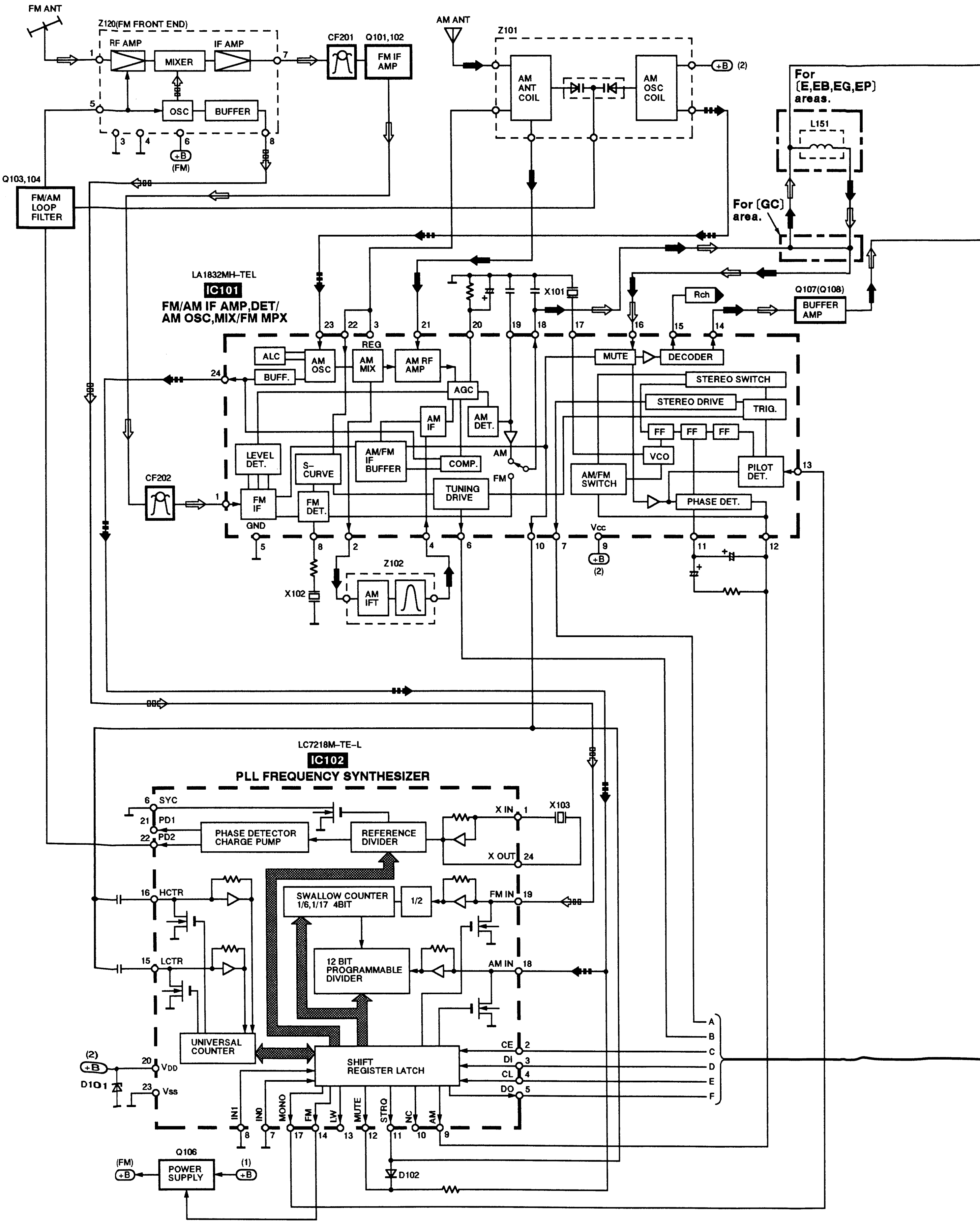
■ Terminal Function of IC's

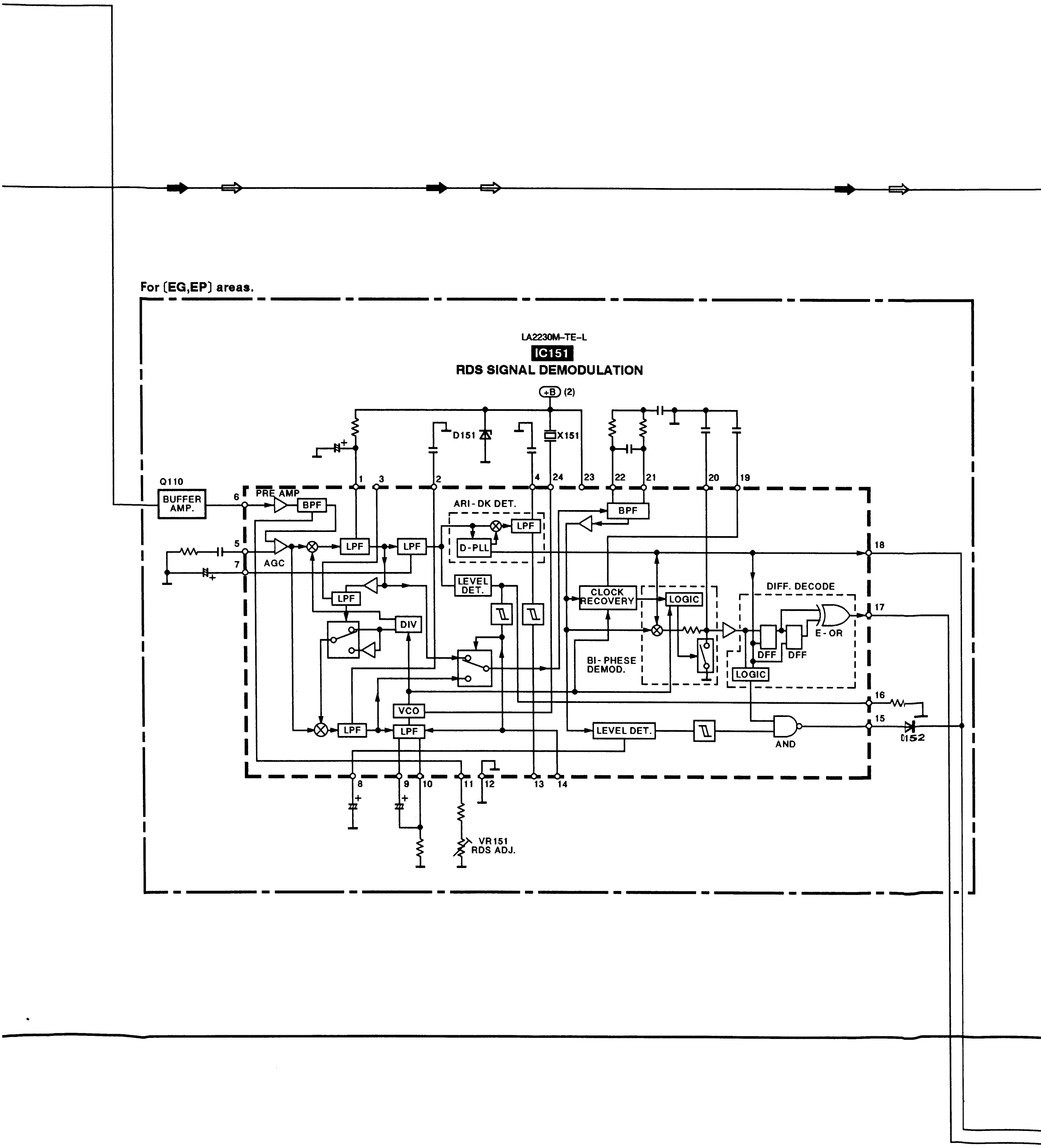
● IC901 (M38198MC097F)...For (E)/(EP), (EB) and (EG) areas (M38198MC099F)...For (GC) area : SYSTEM CONTROL / FL DRIVE

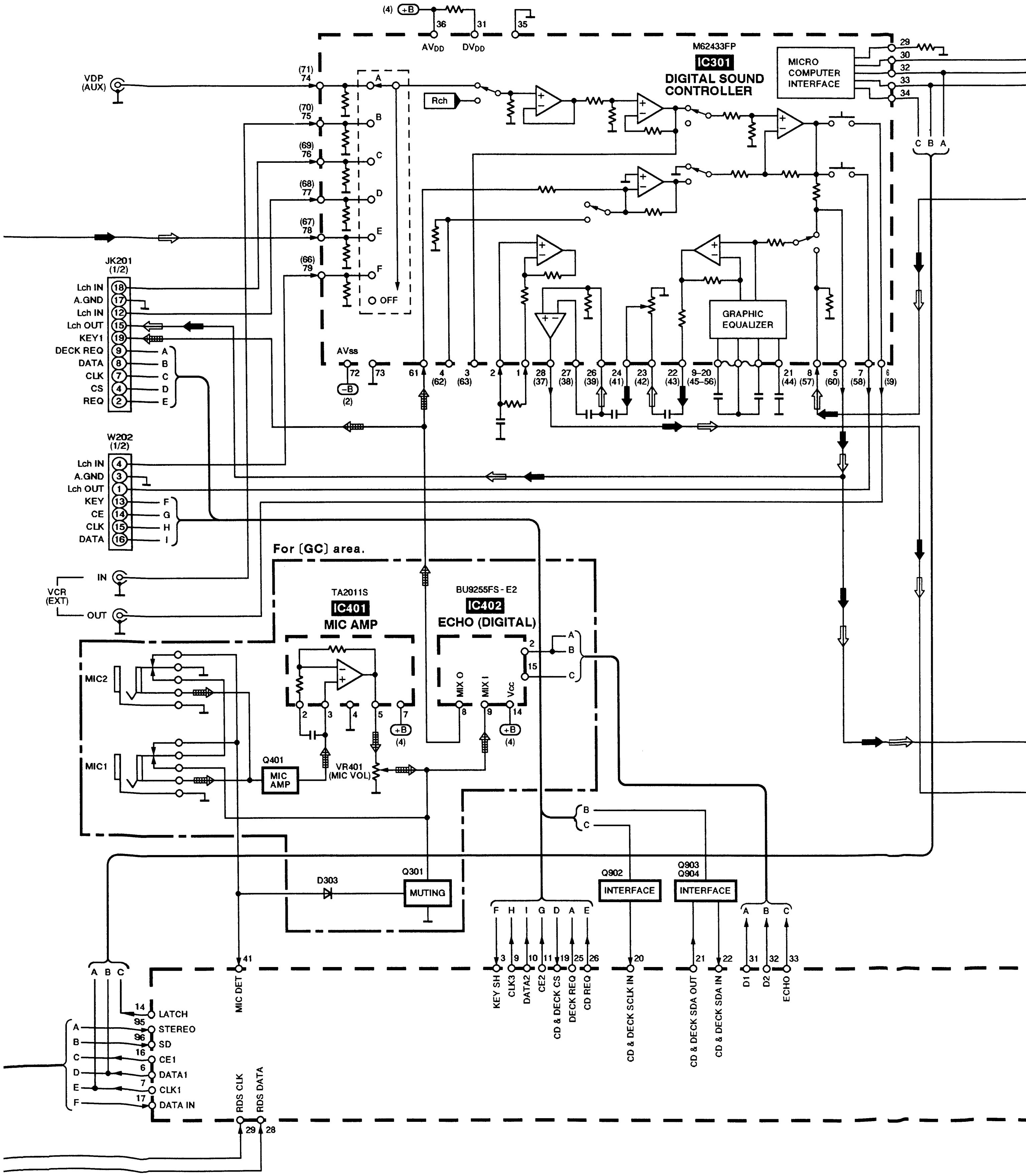
Pin No.	Terminal Name	I/O	Function
1	KEY TU	I	Operation switch signal input (TUNER, TIMER, AMP. section)
2	KEY KRAOKE	I	Operation switch signal input (KARAOKE section)
3	KEY SH	I	SH-EH50 Operation switch signal input
4	KEY CD	I	SL-EH50 Operation switch signal input (CD section)
5	KEY CD2	I	SL-EH50 Operation switch signal input (Changer section)
6	DATA1	O	Data signal output for M62433, M62425, LC7218 and LV1030
7	CLK1	O	Clock signal output for M62433, M62425, LC7218 and LV1030
8	CLK2	O	Clock signal output for M62425 (center and surround volume of dolby pro logic)
9	CLK3	O	Serial communication signal to SH-EH50 (Clock signal output)
10	DATA2	O	Serial communication signal to SH-EH50 (Data signal output)
11	CE2	O	Serial communication signal to SH-EH50 (Chip enable signal output)
12	SEL/TUNER	O	LED (D908) drive signal output (TUNER: “H”)
13	SEL/TUNER	O	LED (D908) drive signal output (TUNER: “L”)
14	LATCH	O	Latch signal output to M62433FP
15	REQ	O	Request signal output to LV1030
16	CE1	O	Chip enable signal output to LC7218
17	DATA IN	I	Data signal input from LC7218
18	CR TIMER	I/O	TIME CONSTANT terminal
19	CD & DECK CS	I	Serial data communication starting signal input (CD and DECK mechanism)
20	CD & DECK SCLK IN	I	Serial clock input (CD and DECK mechanism)
21	CD & DECK SDA OUT	O	Serial data output (CD and DECK mechanism)
22	CD & DECK SDA IN	I	Serial data input (CD and DECK mechanism)
23	MD REQ	O	Not used, open
24	SEL MD	O	
25	DECK REQ	O	RS-EH60 request signal output
26	CD REQ	O	SL-EH50 request signal output
27	DPL & CHECK	O	Clock check signal terminal
28	RDS DATA	I	Not used, open
29	RDS CLK	I	
30	REMOCON	I	Remote control signal input
31, 32	D1, D2	O	ECHO level set up signal output
33	ECHO	O	

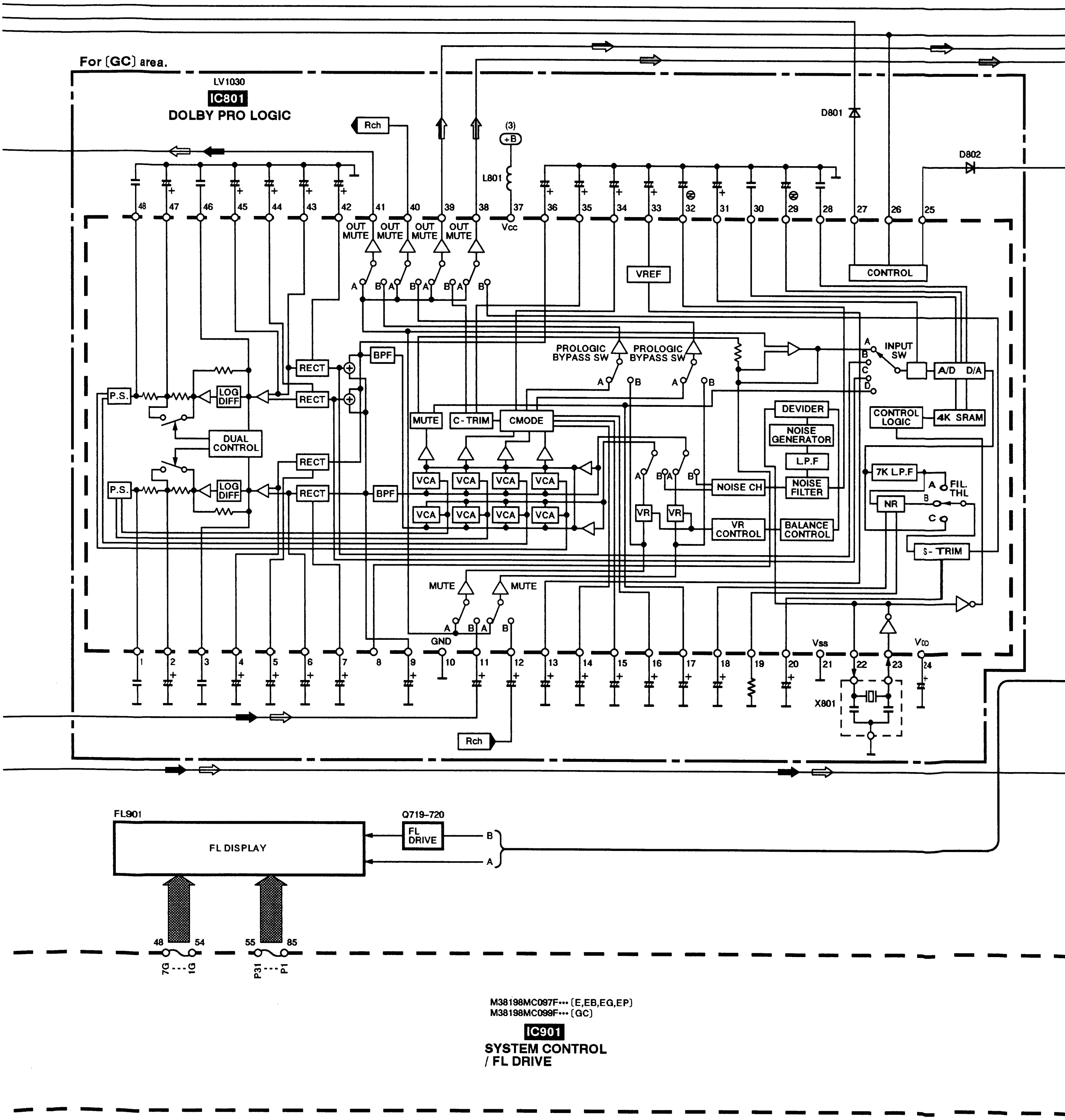
Pin No.	Terminal Name	I/O	Function
34	SYNC	I	AC power source input terminal
35	RESET	I	Reset signal input
36	XC IN	I	Oscillator connected terminal (f = 32 kHz)
37	XC OUT	O	
38	X IN	I	Oscillator connected terminal (f = 6 MHz)
39	X OUT	O	
40	Vss	—	GND terminal
41	MIC DET	I	Microphone connecting detect signal input
42	MUTE	O	Muting signal output
43	V JOGB	I	Volume control signal input
44	V JOGA	I	
45	POWER	O	Power control signal output
46	3DVOCAL	O	3D Vocal control signal output
47	NC	—	No used, open
48~54	7G~1G	O	Grid signal and chip select scan signal output
55~85	P31~P1	O	Segment signal output
86, 87	CS0, CS1	I	Chip select signal input
88	SEL TAPE	O	Tape select signal output
89	MIC S1	O	Microphone signal output for ECHO (except for CD)
90	MIC S2	O	Microphone through signal output (except for CD)
91	VCC	—	Power supply
92	VIBRATE	—	Not used, open
93	CHORUS	—	Not used, open
94	WIDE	—	Not used, open
95	STEREO	I	STEREO signal input for tuner circuit
96	SD	I	Station detector signal input for tuner circuit
97	IJO	I	Unusual condition detect terminal (“L”: unusual
98	-VP	—	Reference voltage input (negative)
99	AVSS	—	Connect to GND
100	VREF	—	Reference voltage input (positive)

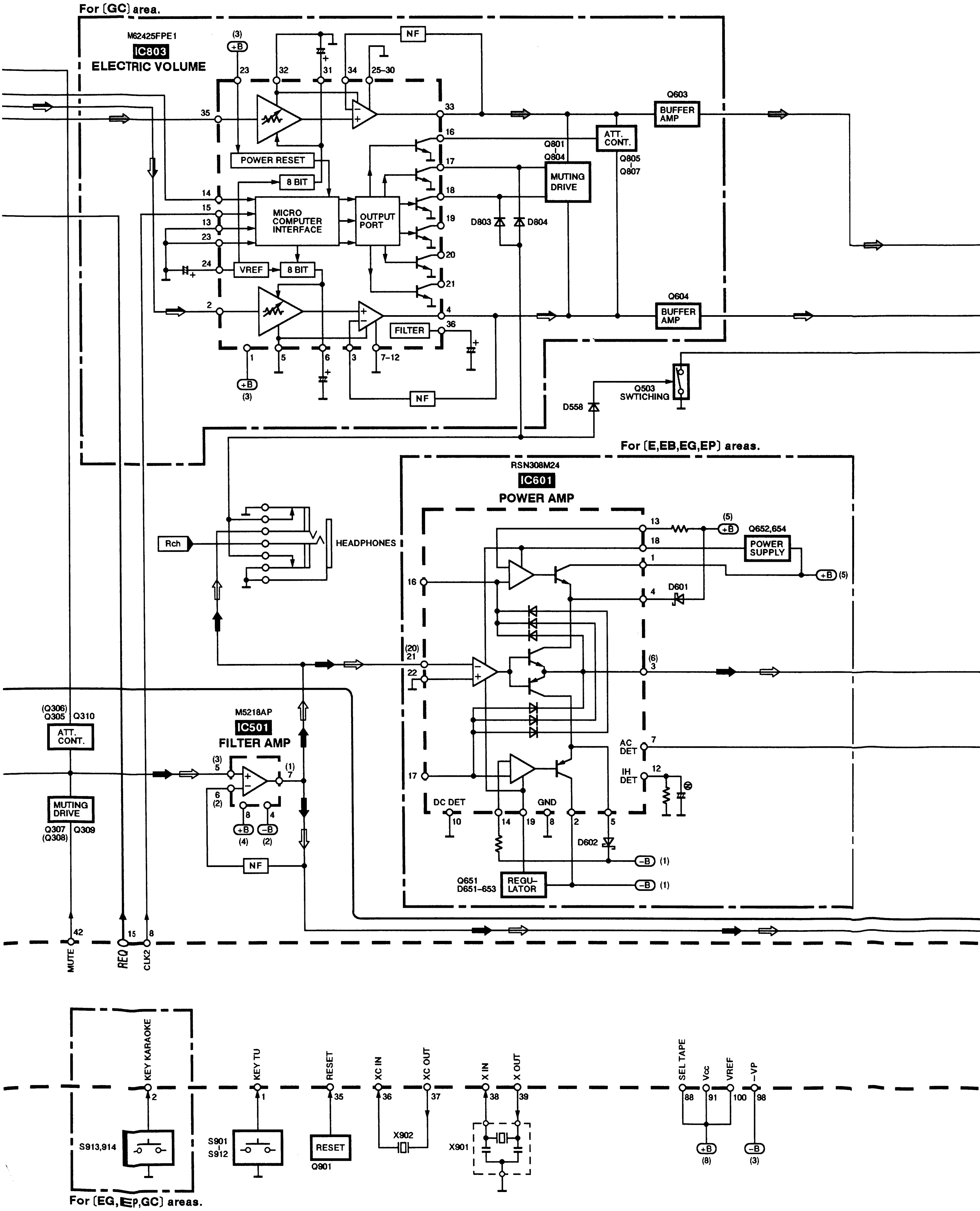
■ Block Diagram

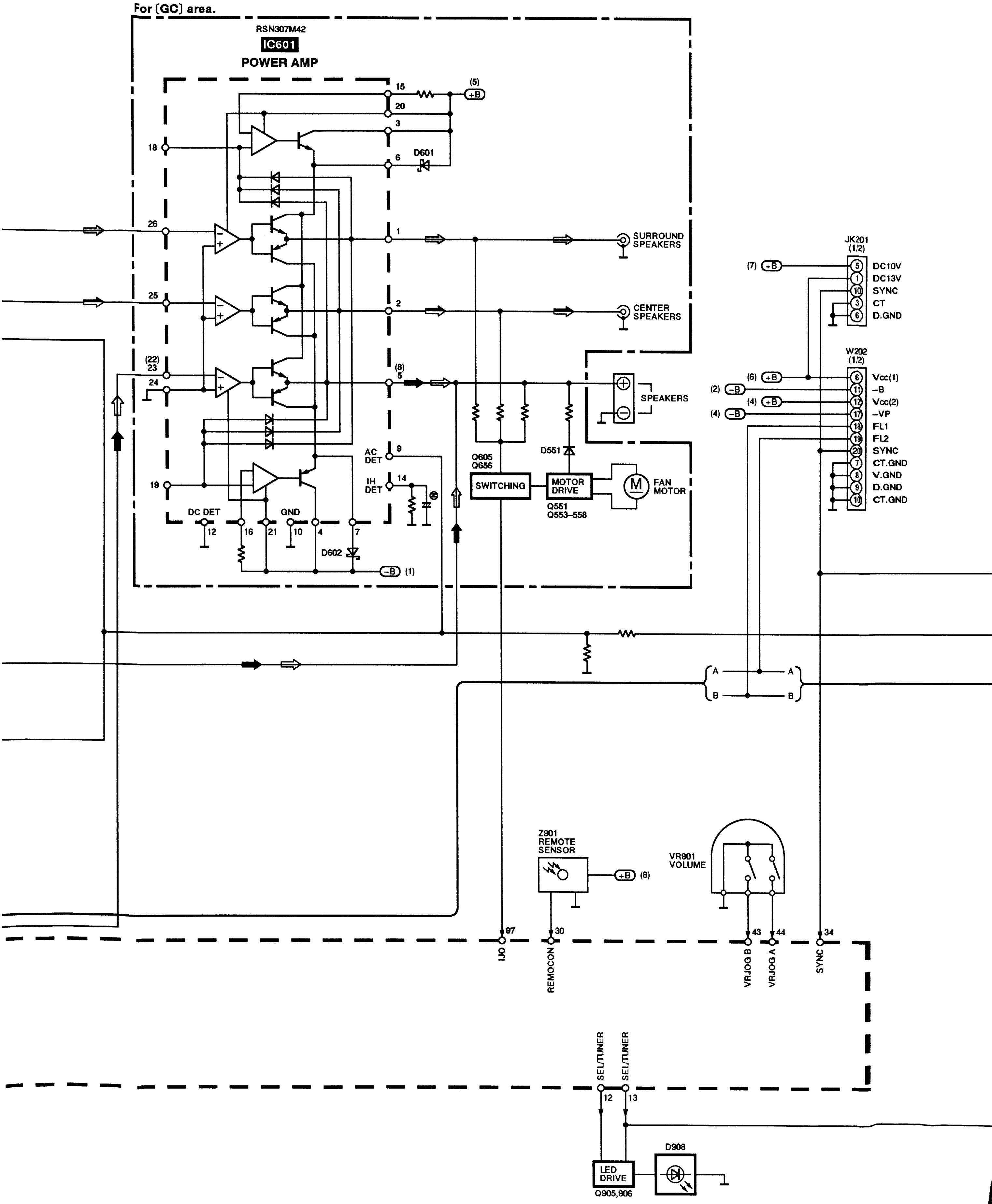

FM ANT
Z120(FM FRONT END)
RF AMP
MIXER
IF AMP
OSC
BUFFER
+B
(FM)
CF201
Q101,102
FM IF AMP
AM ANT
Z101
AM ANT COIL
AM OSC COIL
+B (2)
For (E,EB,EG,EP) areas.
L151
For (GC) area.
Q103,104
FM/AM LOOP FILTER
LA1832MH–TEL
IC101
FM/AM IF AMP,DET/ AM OSC,MIX/FM MPX
X101
Rch
Q107(Q108)
BUFFER AMP
REG
ALC
AM OSC
AM MIX
AM RF AMP
BUFF.
AGC
AM IF
AM DET.
MUTE
DECODER
STEREO SWITCH
STEREO DRIVE
TRIG.
FF
FF
FF
VCO
LEVEL DET.
S-CURVE
AM/FM IF BUFFER
COMP.
AM
FM
TUNING DRIVE
AM/FM SWITCH
PILOT DET.
PHASE DET.
CF202
FM IF
FM DET.
GND
Vcc
+B (2)
X102
Z102
AM IFT
LC7218M–TE–L
IC102
PLL FREQUENCY SYNTHESIZER
SYC
PD1
PD2
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X IN
X OUT
X103
HCTR
SWALLOW COUNTER 1/6,1/17 4BIT
1/2
FM IN
LCTR
12 BIT PROGRAMMABLE DIVIDER
AM IN
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
CE
DI
CL
DO
A
B
C
D
E
F
(2) +B
VDD
D101
Vss
IN1
IN0
MONO
FM
LW
MUTE
STRQ
NC
AM
D102
Q106
(FM) +B
POWER SUPPLY
(1) +B


For (EG,EP) areas.
LA2230M-TE-L
IC151
RDS SIGNAL DEMODULATION
+B (2)
D151
X151
Q110
BUFFER AMP.
PRE AMP
BPF
AGC
LPF
ARI-DK DET.
D-PLL
LEVEL DET.
DIV
VCO
CLOCK RECOVERY
LOGIC
BI-PHESE DEMOD.
DIFF. DECODE
DFF
E-OR
AND
D152
VR151 RDS ADJ.
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24


(4) +B
36
31
35
AVDD
DVDD
M62433FP
IC301
DIGITAL SOUND CONTROLLER
MICRO COMPUTER INTERFACE
29
30
32
33
34
C B A
VDP (AUX)
(71) 74
(70) 75
(69) 76
(68) 77
(67) 78
(66) 79
A
B
C
D
E
F
OFF
Rch
GRAPHIC EQUALIZER
JK201 (1/2)
Lch IN 18
A.GND 17
Lch IN 12
Lch OUT 15
KEY1 19
DECK REQ 9
DATA 8
CLK 7
CS 4
REQ 2
AVss
72
73
-B
(2)
61
4 (62)
3 (63)
2
1
28 (37)
27 (38)
26 (39)
24 (41)
23 (42)
22 (43)
9–20 (45–56)
21 (44)
8 (57)
5 (60)
7 (58)
6 (59)
W202 (1/2)
Lch IN 4
A.GND 3
Lch OUT 1
KEY 13
CE 14
CLK 15
DATA 16
F
G
H
I
For [GC] area.
VCR (EXT)
IN
OUT
TA2011S
IC401
MIC AMP
BU9255FS-E2
IC402
ECHO (DIGITAL)
MIX O
MIX I
Vcc
2
3
4
5
7
8
9
14
15
+B
(4)
MIC2
MIC1
Q401
MIC AMP
VR401 (MIC VOL)
D303
Q301
MUTING
Q902
INTERFACE
Q903 Q904
INTERFACE
F H I G D A E
A B C
41
MIC DET
3 KEY SH
9 CLK3
10 DATA2
11 CE2
19 CD & DECK CS
25 DECK REQ
26 CD REQ
20 CD & DECK SCLK IN
21 CD & DECK SDA OUT
22 CD & DECK SDA IN
31 D1
32 D2
33 ECHO
A B C
14 LATCH
95 STEREO
96 SD
16 CE1
6 DATA1
7 CLK1
17 DATA IN
RDS CLK
RDS DATA
29
28


For [GC] area.
LV1030
IC801
DOLBY PRO LOGIC
Rch
(3)
+B
L801
D801
D802
OUT MUTE
OUT MUTE
OUT MUTE
OUT MUTE
Vcc
VREF
CONTROL
PROLOGIC BYPASS SW
PROLOGIC BYPASS SW
INPUT SW
A/D
D/A
CONTROL LOGIC
4K SRAM
DEVIDER
NOISE GENERATOR
L.P.F
NOISE FILTER
NOISE CH
VR CONTROL
BALANCE CONTROL
7K L.P.F
FIL. THL
NR
S- TRIM
VR
VR
MUTE
C- TRIM
CMODE
VCA
BPF
RECT
P.S.
LOG DIFF
DUAL CONTROL
MUTE
MUTE
GND
Vss
VDD
X801
Rch
FL901
FL DISPLAY
Q719-720
FL DRIVE
B
A
48
54
55
85
7G --- 1G
P31 --- P1
M38198MC097F··· (E,EB,EG,EP)
M38198MC099F··· (GC)
IC901
SYSTEM CONTROL
/ FL DRIVE


For (GC) area.
M62425FPE1
IC803
ELECTRIC VOLUME
(3)
+B
23
32
31
34
25–30
NF
35
33
16
17
18
19
20
21
4
36
POWER RESET
8 BIT
MICRO COMPUTER INTERFACE
OUTPUT PORT
14
15
13
23
24
VREF
8 BIT
2
FILTER
1
5
6
3
7–12
+B
(3)
NF
Q603
BUFFER AMP
ATT. CONT.
Q801
Q804
Q805
Q807
MUTING DRIVE
D803
D804
Q604
BUFFER AMP
Q503
SWITCHING
D558
For (E,EB,EG,EP) areas.
RSN308M24
IC601
POWER AMP
13
18
1
4
(5)
+B
Q652,654
POWER SUPPLY
+B (5)
D601
16
(20)
21
22
(6)
3
7
AC DET
12
IH DET
17
DC DET
10
14
19
GND
8
2
5
D602
-B (1)
-B (1)
Q651
D651–653
REGULATOR
Rch
HEADPHONES
(Q306)
Q305
Q310
ATT. CONT.
MUTING DRIVE
Q307
(Q308)
Q309
M5218AP
IC501
FILTER AMP
(3)
5
(1)
7
6
(2)
8
4
+B
-B
(4)
(2)
NF
42
15
8
MUTE
REQ
CLK2
KEY KARAOKE
2
S913,914
For (EG,EP,GC) areas.
KEY TU
1
S901
S912
RESET
35
RESET
Q901
XC IN
36
XC OUT
37
X902
X IN
38
X OUT
39
X901
SEL TAPE
88
Vcc
91
VREF
100
-VP
98
+B
(8)
-B
(3)

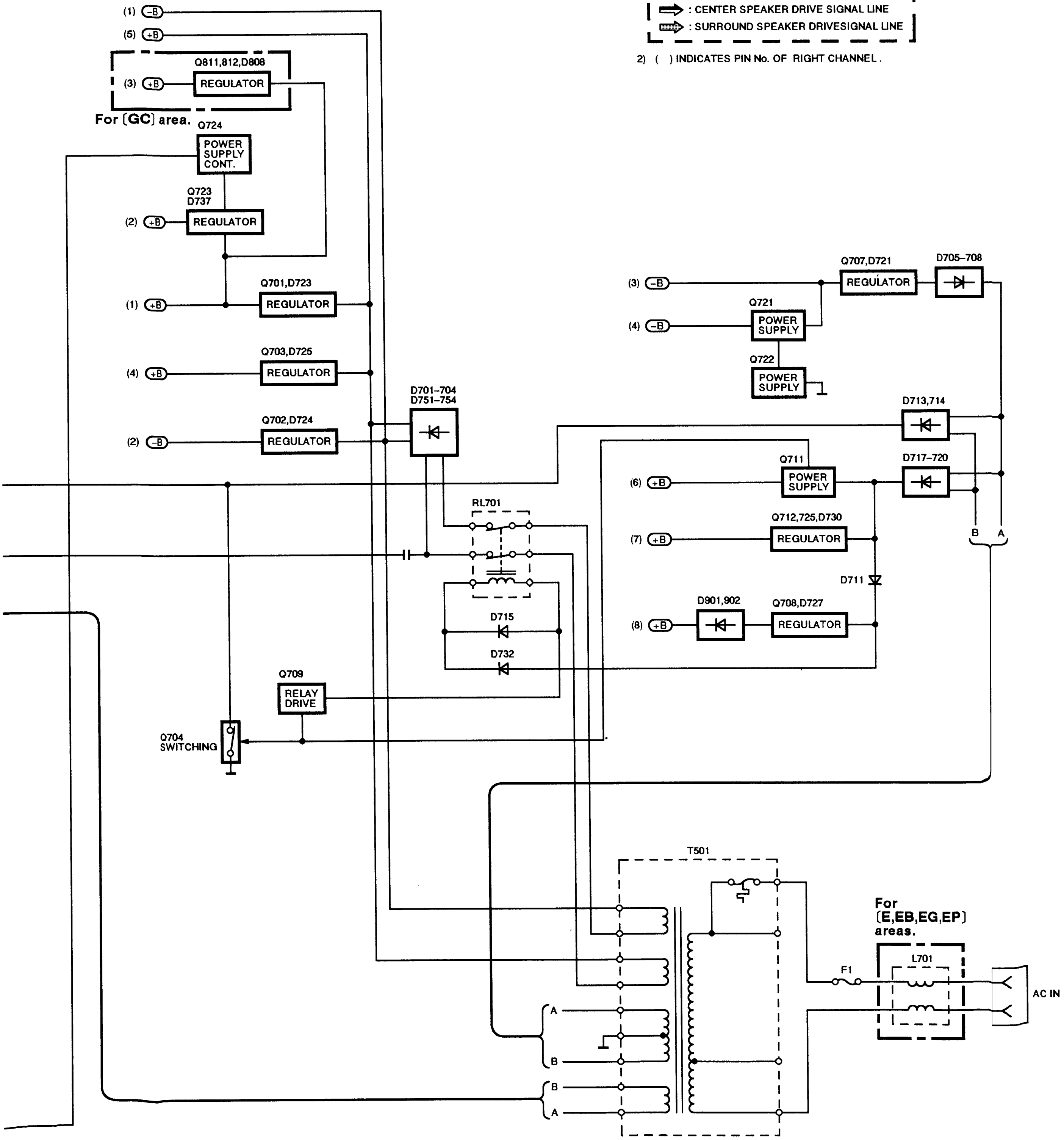

For (GC) area.
RSN307M42
IC601
POWER AMP
15
20
3
6
D601
(5)
+B
18
26
25
(22)
23
24
1
2
(8)
5
SURROUND SPEAKERS
CENTER SPEAKERS
SPEAKERS
19
AC DET
9
IH DET
14
DC DET
12
GND
16
21
10
4
7
D602
-B
(1)
Q605
Q656
SWITCHING
D551
MOTOR DRIVE
Q551
Q553–558
M
FAN MOTOR
JK201
(1/2)
(7)
+B
5
DC10V
1
DC13V
10
SYNC
3
CT
6
D.GND
W202
(1/2)
(6)
+B
6
Vcc(1)
(2)
-B
11
-B
(4)
+B
12
Vcc(2)
(4)
-B
17
-VP
18
FL1
19
FL2
20
SYNC
7
CT.GND
8
V.GND
9
D.GND
10
CT.GND
A
B
A
B
Z901
REMOTE SENSOR
+B
(8)
VR901
VOLUME
97
IJO
30
REMOCON
43
VRJOG B
44
VRJOG A
34
SYNC
SEL/TUNER
SEL/TUNER
12
13
LED DRIVE
Q905,906
D908

NOTES:

1)

- ⇨ : FM SIGNAL LINE
- ▯▯⇨ : FM OSC SIGNAL LINE
- ➡ : AM SIGNAL LINE
- ▮▮➡ : AM OSC SIGNAL LINE
- ▥⇨ : MIC SIGNAL LINE
- ⇨ : CENTER SPEAKER DRIVE SIGNAL LINE
- ▥⇨ : SURROUND SPEAKER DRIVESIGNAL LINE

2) ( ) INDICATES PIN No. OF RIGHT CHANNEL.



(1) −B
(5) +B
Q811,812,D808
(3) +B
REGULATOR
For [GC] area.
Q724
POWER SUPPLY CONT.
Q723
D737
(2) +B
REGULATOR
Q701,D723
(1) +B
REGULATOR
Q703,D725
(4) +B
REGULATOR
D701–704
D751–754
Q702,D724
(2) −B
REGULATOR
RL701
D715
D732
Q709
RELAY DRIVE
Q704
SWITCHING
Q707,D721
D705–708
(3) −B
REGULATOR
Q721
(4) −B
POWER SUPPLY
Q722
POWER SUPPLY
D713,714
D717–720
Q711
(6) +B
POWER SUPPLY
Q712,725,D730
(7) +B
REGULATOR
B
A
D711
D901,902
Q708,D727
(8) +B
REGULATOR
T501
For [E,EB,EG,EP] areas.
L701
F1
AC IN
A
B
B
A

■ Replacement Parts List (Electrical) [For (E) and (EB) areas]

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	LA1832MH-TEL	IC	[M]
IC102	LC7218M-TE-L	IC	[M]
IC301	M62433FP	IC	[M]
IC501	M5218AP	IC	[M]
IC601⚠	RSN308M24	IC	[M]
IC901	M38198MC097F	IC	[M]
		TRANSISTOR(S)	
Q101, 102	2SC2787L	TRANSISTOR	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]
Q106	UN411FTA	TRANSISTOR	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]
Q305, 306	2SC3311AIRTA	TRANSISTOR	[M]
Q307, 308	2SD2144S	TRANSISTOR	[M]
Q309, 310	UN4115	TRANSISTOR	[M]
Q503	2SD1450RTA	TRANSISTOR	[M]
Q551	2SA1309AIRTA	TRANSISTOR	[M]
Q554	2SA1309AIRTA	TRANSISTOR	[M]
Q555	2SD2144S	TRANSISTOR	[M]
Q558	2SD2144S	TRANSISTOR	[M]
Q605	2SC3311AIRTA	TRANSISTOR	[M]
Q651⚠	2SB1238QRTV6	TRANSISTOR	[M]
Q652	2SD1859QRTV2	TRANSISTOR	[M]
Q654	2SD1859QRTV2	TRANSISTOR	[M]
Q656	2SC3311AIRTA	TRANSISTOR	[M]
Q701⚠	2SD2374PQAU	TRANSISTOR	[M]
Q702⚠	2SB1548PQAU	TRANSISTOR	[M]
Q703⚠	2SD2374PQAU	TRANSISTOR	[M]
Q704	UN4211	TRANSISTOR	[M]
Q707⚠	2SB621A-R	TRANSISTOR	[M]
Q708⚠	2SD2137PQTA	TRANSISTOR	[M]
Q709	2SD2144S	TRANSISTOR	[M]
Q711	2SB1417PQTA	TRANSISTOR	[M]
Q712⚠	2SB1548PQAU	TRANSISTOR	[M]
Q718	UN4111	TRANSISTOR	[M]
Q719, 720	2SD1450RTA	TRANSISTOR	[M]
Q721	2SC3311AIRTA	TRANSISTOR	[M]
Q722	2SA1309AIRTA	TRANSISTOR	[M]
Q723⚠	2SC3940AQSTA	TRANSISTOR	[M]
Q724	UN4211	TRANSISTOR	[M]
Q725⚠	2SC3311AIRTA	TRANSISTOR	[M]
Q901	UN4214TA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q902-904	2SC3311AIRTA	TRANSISTOR	[M]
Q905, 906	UN411FTA	TRANSISTOR	[M]
		DIODE(S)	
D101⚠	MA4051MTA	DIODE	[M]
D102	MA165	DIODE	[M]
D331	MA4051-L	DIODE	[M]
D551, 552	MA165	DIODE	[M]
D555	MA4100MTA	DIODE	[M]
D558	MA165	DIODE	[M]
D601, 602	SB360L6508	DIODE	[M]
D651⚠	MA4200M	DIODE	[M]
D652, 653⚠	MA4140M	DIODE	[M]
D657, 658	MA165	DIODE	[M]
D701-704⚠	1N5402BF	DIODE	[M]
D705-708⚠	RL1N4003N02	DIODE	[M]
D709	MA165	DIODE	[M]
D710	MA4051MTA	DIODE	[M]
D711	RL1N4003N02	DIODE	[M]
D713, 714⚠	MA185TA	DIODE	[M]
D715	MA165	DIODE	[M]
D717-720⚠	RL1N4003N02	DIODE	[M]
D721⚠	MA4300M	DIODE	[M]
D723⚠	MA4150M	DIODE	[M]
D724, 725⚠	MA4082LTA	DIODE	[M]
D727⚠	MA4062-H	DIODE	[M]
D730⚠	MA4100MTA	DIODE	[M]
D732-736	MA165	DIODE	[M]
D737⚠	MA4082LTA	DIODE	[M]
D738, 739	MA165	DIODE	[M]
D751, 752⚠	1N5402BF	DIODE	[M]
D753, 754⚠	RL1N4003N02	DIODE	[M]
D901, 902	1SS291TA	DIODE	[M]
D903, 904	MA165	DIODE	[M]
D905	1SS291TA	DIODE	[M]
D906, 907	MA165	DIODE	[M]
D908	SPR505MDTT	L. E. D.	[M]
D909	MA165	DIODE	[M]
D931	MA165	DIODE	[M]
D934	MA165	DIODE	[M]
D936	MA165	DIODE	[M]
D943	MA165	DIODE	[M]
D971, 972	MA165	DIODE	[M]
D973	MA4039MTA	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)	
VR901	EVQVBXFK124B	V. R	[M]
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Z120	RAL0019	FM FRONT END	[M]
Z901	RCDGP1U28XD	REMOTE SENSOR	[M]
		COIL(S)	
L101	ELESNR68MA	COIL	[M]
L103	ELEXTR47MA9	COIL	[M]
L105, 106	ELELN822KL	COIL	[M]
L151	SLM1B10M-1M	COIL	[M]
L191	ELESNR68MA	COIL	[M]
L601, 602	SLQY07G-40	COIL	[M]
L701⚠	RLQZ271M-K	COIL	[M]
L901	RLQA100JT-Y	COIL	[M]
		TRANSFORMER(S)	
T501⚠	RTP2N5B009	POWER TRANSFORMER	[M]
		FILTER(S)	
CF201	RLFFETNGD01L	CERAMIC FILTER	[M]
CF202	RLFFETMGD01L	CERAMIC FILTER	[M]
		OSCILLATOR(S)	
X101	RSXZ456KM07M	OSCILLATOR	[M]
X102	RLFDGT05DD	OSCILLATOR	[M]
X103	RSXC7M20S05T	OSCILLATOR	[M]
X901	EFOEC6004T4	OSCILLATOR	[M]
X902	RSXD32K7S02	OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0234-F	DISPLAY TUBE	[M]
		FUSE(S)	
F1⚠	XBA2C12TB0S	FUSE	[M]
		SWITCH(ES)	
S901-912	EVQ21405R	SW	[M]
		CONNECTOR(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
CN201	RJU057W010	CONNECTOR(10P)	[M]
CN203	RJU057W012	CONNECTOR(12P)	[M]
CN701-709	RJS1A1101T1	CONNECTOR(1P)	[M]
CN711-713	RJS1A1101T1	CONNECTOR(1P)	[M]
CN715	RJU057W012	CONNECTOR(12P)	[M]
CN721	RJS9T5ZA	CONNECTOR(9P)	[M]
CN904	RJS2A2105	CONNECTOR(5P)	[M]
CN101B	RJU057W007	CONNECTOR(7P)	[M]
CN102B	RJU057W007	CONNECTOR(7P)	[M]
CP201	RJT057W010-1	CONNCTOR(10P)	[M]
CP203	RJT057W012-1	CONNECTOR(12P)	[M]
CP715	RJT057W012-1	CONNECTOR(12P)	[M]
CP101B	RJT057W007-1	CONNECTOR(7P)	[M]
CP102B	RJT057W007-1	CONNECTOR(7P)	[M]
		EARTH TERMINAL(S)	
E601	SNE1004-2	EARTH TERMINAL	[M]
E603	SNE1004-2	EARTH TERMINAL	[M]
		FUSE HOLDER(S)	
FC1, 2	EYF52BC	FUSE HOLDER	[M]
		RELAY(S)	
RL701⚠	RSY0030-C	RELAY	[M]
		JACK(S)	
JK101	RJH5210M	ANTENNA	[M]
JK201	RJT065K19	SYSTEM	[M]
JK203	SJF3068-7N	VCR IN	[M]
JK204	SJF3069-5N	VDP/VCR OUT	[M]
JK501	RJR0054M	SPEAKERS	[M]
JK701⚠	SJS9236	AC INLET	[M]
JK903	RJJ37TN01-C	HEADPHONES	[M]

■ Resistors and Capacitors [For (E) and (EB) areas]

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
			R235, 236	ERDS2TJ102	1/4W 1K [M]	R561	ERDS2TJ104	1/4W 100K [M]
		RESISTORS	R239-242	ERDS2TJ102	1/4W 1K [M]	R562	ERDS2TJ102	1/4W 1K [M]
			R243, 244	ERDS2TJ152	1/4W 1.5K [M]	R563, 564	ERDS2TJ273	1/4W 27K [M]
R103	ERDS2TJ330	1/4W 33 [M]	R245, 246	ERDS2TJ332	1/4W 3.3K [M]	R570	ERDS2TJ335T	1/4W 3.3M [M]
R104	ERDS2TJ103	1/4W 10K [M]	R249, 250	ERDS2TJ101	1/4W 100 [M]	R591	ERDS2TJ473	1/4W 47K [M]
R105	ERDS2TJ471	1/4W 470 [M]	R251	ERDS2TJ222	1/4W 2.2K [M]	R604, 605	ERDS2TJ103	1/4W 10K [M]
R106	ERDS2TJ474	1/4W 470K [M]	R253, 254	ERDS2TJ104	1/4W 100K [M]	R619, 620	ERDS2TJ563	1/4W 56K [M]
R107	ERDS2TJ331	1/4W 330 [M]	R255, 256	ERDS2TJ123	1/4W 12K [M]	R623	ERDS2TJ684	1/4W 680K [M]
R108	ERDS2TJ474	1/4W 470K [M]	R257, 258	ERDS2TJ562	1/4W 5.6K [M]	R624	ERDS2TJ223	1/4W 22K [M]
R109	ERDS2TJ331	1/4W 330 [M]	R261, 262⚠	ERD25FVJ1R0T	1/4W 1.0 [M]	R628	ERDS2TJ184T	1/4W 180K [M]
R110	ERDS2TJ102	1/4W 1K [M]	R301	ERDS2TJ223	1/4W 22K [M]	R629, 630	ERDS2TJ100	1/4W 10 [M]
R112	ERDS2TJ104	1/4W 100K [M]	R302	ERDS2TJ472	1/4W 4.7K [M]	R631	ERDS2TJ224T	1/4W 220K [M]
R113	ERDS2TJ103	1/4W 10K [M]	R303, 304	ERDS2TJ222	1/4W 2.2K [M]	R632, 633	ERDS2TJ563	1/4W 56K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]	R305, 306	ERDS2TJ152	1/4W 1.5K [M]	R637	ERDS2TJ154	1/4W 150K [M]
R115	ERDS2TJ561	1/4W 560 [M]	R307, 308	ERDS2TJ104	1/4W 100K [M]	R638	ERDS2TJ684	1/4W 680K [M]
R116	ERDS2TJ102	1/4W 1K [M]	R309, 310	ERDS2TJ102	1/4W 1K [M]	R639-642⚠	ERDS1FVJ100T	1/2W 10 [M]
R117	ERDS2TJ823T	1/4W 82K [M]	R311, 312	ERDS2TJ104	1/4W 100K [M]	R647, 648	ERQ16NKWR15E	1/6W 0.15 [M]
R118	ERDS2TJ562	1/4W 5.6K [M]	R313, 314	ERDS2EJ121	1/4W 120 [M]	R651	ERDS2TJ222	1/4W 2.2K [M]
R119	ERDS2TJ822	1/4W 8.2K [M]	R315	ERDS2TJ104	1/4W 100K [M]	R654	ERDS2TJ222	1/4W 2.2K [M]
R120	ERDS2TJ473	1/4W 47K [M]	R316	ERDS2TJ222	1/4W 2.2K [M]	R655, 656	ERDS2TJ183T	1/4W 18K [M]
R121	ERDS2TJ332	1/4W 3.3K [M]	R317	ERDS2TJ105T	1/4W 1M [M]	R667	ERDS2TJ331	1/4W 330 [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]	R318	ERDS2TJ153	1/4W 15K [M]	R701, 702	ERDS2TJ273	1/4W 27K [M]
R124	ERDS2TJ271	1/4W 270 [M]	R324	ERDS2TJ223	1/4W 22K [M]	R703, 704	ERDS2TJ101	1/4W 100 [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]	R326	ERDS2TJ332	1/4W 3.3K [M]	R707⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R127	ERDS2TJ103	1/4W 10K [M]	R327	ERDS2TJ392T	1/4W 3.9K [M]	R708	ERDS2TJ472	1/4W 4.7K [M]
R128	ERDS2TJ820	1/4W 82 [M]	R328	ERDS2TJ332	1/4W 3.3K [M]	R712	ERDS2TJ152	1/4W 1.5K [M]
R129	ERDS2TJ473	1/4W 47K [M]	R329	ERDS2TJ103	1/4W 10K [M]	R713, 714	ERDS2TJ332	1/4W 3.3K [M]
R130	ERDS2TJ103	1/4W 10K [M]	R330	ERDS2TJ332	1/4W 3.3K [M]	R715	ERDS2TJ183T	1/4W 18K [M]
R132	ERDS2TJ103	1/4W 10K [M]	R331	ERDS2TJ102	1/4W 1K [M]	R717	ERDS2TJ473	1/4W 47K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]	R332-334	ERDS2TJ222	1/4W 2.2K [M]	R721⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R138	ERDS2TJ103	1/4W 10K [M]	R335, 336	ERDS2TJ683	1/4W 68K [M]	R722⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]	R338	ERDS2TJ392T	1/4W 3.9K [M]	R723	ERDS2TJ562	1/4W 5.6K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]	R343	ERDS2TJ334	1/4W 330K [M]	R724	ERDS2TJ152	1/4W 1.5K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]	R360	ERDS2TJ223	1/4W 22K [M]	R725, 726	ERDS2TJ100	1/4W 10 [M]
R145, 146	ERDS2TJ821	1/4W 820 [M]	R364	ERDS2TJ103	1/4W 10K [M]	R727	ERDS2TJ152	1/4W 1.5K [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]	R365	ERDS2TJ223	1/4W 22K [M]	R729	ERDS2TJ221	1/4W 220 [M]
R149	ERDS2TJ680T	1/4W 68 [M]	R380	ERDS2TJ153	1/4W 15K [M]	R735⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]	R503, 504	ERDS2TJ333	1/4W 33K [M]	R736	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]	R505, 506	ERDS2TJ153	1/4W 15K [M]	R737	ERDS2TJ221	1/4W 220 [M]
R175	ERDS2TJ102	1/4W 1K [M]	R507, 508	ERDS2TJ332	1/4W 3.3K [M]	R738	ERDS2TJ392T	1/4W 3.9K [M]
R176	ERDS2TJ391	1/4W 390 [M]	R509-512	ERDS2TJ560T	1/4W 56 [M]	R739	ERDS2TJ473	1/4W 47K [M]
R201, 202⚠	ERDS2FJ752	1/4W 7.5K [M]	R513, 514	ERDS2TJ103	1/4W 10K [M]	R748	ERDS2TJ102	1/4W 1K [M]
R217, 218	ERDS2TJ562	1/4W 5.6K [M]	R551	ERDS2TJ183T	1/4W 18K [M]	R749	ERDS2TJ271	1/4W 270 [M]
R221, 222	ERDS2FJ752	1/4W 7.5K [M]	R552	ERDS2TJ473	1/4W 47K [M]	R755⚠	ERDS1FVJ8R2T	1/2W 8.2 [M]
R223, 224	ERDS2TJ562	1/4W 5.6K [M]	R555	ERDS2TJ223	1/4W 22K [M]	R756⚠	ERDS1FJ4R7	1/2W 4.7 [M]
R225, 226	ERDS2TJ104	1/4W 100K [M]	R556	ERDS2TJ104	1/4W 100K [M]	R757-759	ERDS2TJ103	1/4W 10K [M]
R227, 228	ERDS2TJ222	1/4W 2.2K [M]	R557	ERDS2TJ103	1/4W 10K [M]	R761, 762	ERDS2TJ822	1/4W 8.2K [M]
R229, 230	ERDS2TJ822	1/4W 8.2K [M]	R558	ERDS2TJ102	1/4W 1K [M]	R763	ERDS2TJ472	1/4W 4.7K [M]
R231-234	ERDS2TJ682T	1/4W 6.8K [M]	R559	ERDS2TJ472	1/4W 4.7K [M]	R764	ERDS2TJ331	1/4W 330 [M]

Ref. No.	Part No.	Values & Remarks
R765⚠	ERDS1FVJ561T	1/2W 560 [M]
R766	ERDS2TJ102	1/4W 1K [M]
R767⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R768	ERDS2TJ101	1/4W 100 [M]
R791, 792⚠	RSFMB30KT-L	PROTECTOR [M]
R901	ERDS2TJ821	1/4W 820 [M]
R902	ERDS2TJ102	1/4W 1K [M]
R903	ERDS2TJ122	1/4W 1.2K [M]
R904	ERDS2TJ152	1/4W 1.5K [M]
R905	ERDS2TJ182	1/4W 1.8K [M]
R906	ERDS2TJ222	1/4W 2.2K [M]
R907	ERDS2TJ272T	1/4W 2.7K [M]
R908	ERDS2TJ472	1/4W 4.7K [M]
R909	ERDS2TJ682T	1/4W 6.8K [M]
R910	ERDS2TJ123	1/4W 12K [M]
R911	ERDS2TJ223	1/4W 22K [M]
R912	ERDS2TJ821	1/4W 820 [M]
R919-923	ERDS2TJ103	1/4W 10K [M]
R924-927	ERDS2TJ102	1/4W 1K [M]
R929	ERDS2TJ102	1/4W 1K [M]
R930	ERDS2TJ101	1/4W 100 [M]
R931-936	ERDS2TJ102	1/4W 1K [M]
R937	ERDS2TJ562	1/4W 5.6K [M]
R938	ERDS2TJ102	1/4W 1K [M]
R939	ERDS2TJ152	1/4W 1.5K [M]
R940, 941	ERDS2TJ102	1/4W 1K [M]
R942	ERDS2TJ101	1/4W 100 [M]
R943	ERDS2TJ102	1/4W 1K [M]
R946	ERDS2TJ102	1/4W 1K [M]
R947, 948	ERDS2TJ104	1/4W 100K [M]
R949	ERDS2TJ472	1/4W 4.7K [M]
R950	ERDS2TJ101	1/4W 100 [M]
R951	ERDS2TJ334	1/4W 330K [M]
R952	ERDS2TJ106T	1/4W 10M [M]
R953	ERDS2TJ101	1/4W 100 [M]
R954	ERDS2TJ104	1/4W 100K [M]
R955	ERDS2TJ824	1/4W 820K [M]
R956-958	ERDS2TJ102	1/4W 1K [M]
R959	ERDS2TJ471	1/4W 470 [M]
R960	ERDS2TJ152	1/4W 1.5K [M]
R961, 962	ERDS2TJ223	1/4W 22K [M]
R963, 964	ERDS2TJ103	1/4W 10K [M]
R965	ERDS2TJ472	1/4W 4.7K [M]
R966	ERDS2TJ103	1/4W 10K [M]
R967	ERDS2TJ473	1/4W 47K [M]
R968	ERDS2TJ103	1/4W 10K [M]
R969, 970	ERDS2TJ472	1/4W 4.7K [M]
R971	ERDS2TJ473	1/4W 47K [M]
R972	ERDS2TJ223	1/4W 22K [M]
R974	ERDS2TJ101	1/4W 100 [M]
R975	ERDS2TJ181T	1/4W 180 [M]
R977-981	ERDS2TJ104	1/4W 100K [M]

Ref. No.	Part No.	Values & Remarks
R984, 985	ERDS2TJ473	1/4W 47K [M]
R986-988	ERDS2TJ102	1/4W 1K [M]
R989, 990	ERDS2TJ393	1/4W 39K [M]
R991	ERDS2TJ473	1/4W 47K [M]
R993, 994	ERDS2TJ104	1/4W 100K [M]
R996, 997	ERDS2TJ151	1/4W 150 [M]
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U [M]
C103	ECBT1C103NS5	16V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]
C106	ECBT1C103NS5	16V 0.01U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]
C112	ECBT1C103NS5	16V 0.01U [M]
C113	ECBT1H102KB5	50V 1000P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]
C115	ECEA1EKA4R7B	25V 4.7U [M]
C116	ECBT1C822KS5	16V 8200P [M]
C117	ECQP1391JZ	100V 390P [M]
C118, 119	ECFR1C103KR	16V 0.01U [M]
C120, 121	ECEA1HKA010B	50V 1U [M]
C122	ECEA1HKA2R2B	50V 2.2U [M]
C123	ECEA1HKA010B	50V 1U [M]
C124	ECBT1H102KB5	50V 1000P [M]
C125	ECBT1H150JC5	50V 15P [M]
C126	ECBT1H473ZF5	50V 0.047U [M]
C127	ECEA1CKA220B	16V 22U [M]
C128	ECBT1H102KB5	50V 1000P [M]
C129, 130	ECEA0JKA101B	6.3V 100U [M]
C132	ECBT1H102KB5	50V 1000P [M]
C133, 134	ECBT1H270JU5	50V 27P [M]
C135, 136	ECBT1C103KS5	16V 0.01U [M]
C137, 138	ECBT1H561KB5	50V 560P [M]
C139, 140	ECBT1C682KR5	16V 6800P [M]
C141-144	ECEA1HKA010B	50V 1U [M]
C145	ECBT1H220JC5	50V 22P [M]
C148	ECBT1C103NS5	16V 0.01U [M]
C149	ECBT1H104ZF5	50V 0.1U [M]
C171, 172	ECBT1H102KB5	50V 1000P [M]
C173	ECEA1CKA220B	16V 22U [M]
C174	RCE1CKA100BG	16V 10U [M]
C181	ECBT1H471KB5	50V 470P [M]
C196	ECBT1H102KB5	50V 1000P [M]
C201, 202	ECBT1H180J5	50V 18P [M]
C219-226	ECBT1H101KB5	50V 100P [M]
C229-234	ECBT1H101KB5	50V 100P [M]
C235, 236	ECBT1H104ZF5	50V 0.1U [M]
C301	ECBT1H102KB5	50V 1000P [M]

Ref. No.	Part No.	Values & Remarks
C302, 303	ECBT1H561KB5	50V 560P [M]
C309	ECEA1HKAR22B	50V 0.22U [M]
C310	ECFR1C393KR	16V 0.039U [M]
C312	ECFR1C823MR	16V 0.082U [M]
C313	ECFR1C103KR	16V 0.01U [M]
C315	ECFR1C223KR	16V 0.022U [M]
C316	ECBT1C332KR5	16V 3300P [M]
C318	ECBT1C682KR5	16V 6800P [M]
C319	ECBT1H102KB5	50V 1000P [M]
C320	ECBA1H681KB5	50V 680P [M]
C321	ECBT1C332KR5	16V 3300P [M]
C322	ECQV1H333JM3	50V 0.033U [M]
C324	ECFR1C683KR	16V 0.068U [M]
C325	ECQV1H154JM3	50V 0.15U [M]
C326	ECBT1H102KB5	50V 1000P [M]
C327	ECBT1H471KB5	50V 470P [M]
C328	RCE1CKA470BG	16V 47U [M]
C329	ECEA1HKA2R2B	50V 2.2U [M]
C330	ECBA1H681KB5	50V 680P [M]
C331	ECBT1H104ZF5	50V 0.1U [M]
C332-334	ECBT1H470J5	50V 47P [M]
C336	ECBT1H104ZF5	50V 0.1U [M]
C337	RCE1CKA470BG	16V 47U [M]
C338	ECBT1H471KB5	50V 470P [M]
C339	ECBT1H102KB5	50V 1000P [M]
C340	ECQV1H154JM3	50V 0.15U [M]
C341	ECFR1C683KR	16V 0.068U [M]
C342	ECQV1H333JM3	50V 0.033U [M]
C343	ECEA1HKA2R2B	50V 2.2U [M]
C344	ECBT1C332KR5	16V 3300P [M]
C346	ECBT1H102KB5	50V 1000P [M]
C347	ECBT1C682KR5	16V 6800P [M]
C349	ECBT1C332KR5	16V 3300P [M]
C350	ECFR1C223KR	16V 0.022U [M]
C352	ECFR1C103KR	16V 0.01U [M]
C353	ECFR1C823MR	16V 0.082U [M]
C355	ECFR1C393KR	16V 0.039U [M]
C356	ECEA1HKAR22B	50V 0.22U [M]
C357, 358	ECQV1H683JM3	50V 0.068U [M]
C359	RCE1HKA3R3BG	50V 3.3U [M]
C360	RCE1HKA4R7BG	50V 4.7U [M]
C364	ECBT1C152KR5	16V 1500P [M]
C365	ECQV1H154JM3	50V 0.15U [M]
C372	ECBT1H104ZF5	50V 0.1U [M]
C385, 386	ECEA1HKAR22B	50V 0.22U [M]
C395, 396	ECBT1H473ZF5	50V 0.047U [M]
C501-506	ECBT1H101KB5	50V 100P [M]
C507, 508	RCE1CKA100BG	16V 10U [M]
C509-512	ECBT1E103ZF	25V 0.01U [M]
C513, 514	ECBT1C103KS5	16V 0.01U [M]
C551	ECEA1HKA2R2B	50V 2.2U [M]
C552	ECBT1E103ZF	25V 0.01U [M]

Ref. No.	Part No.	Values & Remarks
C553	ECEA1HKAR68B	50V 0.68U [M]
C554	ECEA1AKA221B	10V 220U [M]
C557, 558	ECFR1C393KR	16V 0.039U [M]
C604, 605	RCE1CKA100BG	16V 10U [M]
C607, 608	ECBT1C122KR5	16V 1200P [M]
C613, 614	ECBT1H150JC5	50V 15P [M]
C615	ECEA2AU010	100V 1U [M]
C616	ECA1JM330B	63V 33U [M]
C617	ECEA1HN2R2	50V 2.2U [M]
C618	ECA1HM101B	50V 100U [M]
C620, 621	ECQV1H473JM3	50V 0.047U [M]
C631, 632	ECBT1H102KB5	50V 1000P [M]
C633	ECBT1C103KS5	16V 0.01U [M]
C655	ECEA2AU3R3B	100V 3.3U [M]
C656	ECBT1E103ZF	25V 0.01U [M]
C657	ECBT1H104ZF5	50V 0.1U [M]
C701, 702⚠	ECA1VM472E	35V 4700U [M]
C703, 704⚠	ECA1VM332E	35V 3300U [M]
C705	RCE1CKA100BG	16V 10U [M]
C706	RCE1VKA100BG	35V 10U [M]
C707	ECBT1E103ZF	25V 0.01U [M]
C708	RCE1CKA100BG	16V 10U [M]
C709	ECBT1H104ZF5	50V 0.1U [M]
C710	ECBT1E103ZF	25V 0.01U [M]
C711	RCE1EM471BV	25V 470U [M]
C714	ECBT1H102KB5	50V 1000P [M]
C715⚠	ECA1EM472E	25V 4700U [M]
C717	ECEA1CKA330B	16V 33U [M]
C718	RCE1AKA101BG	10V 100U [M]
C719, 720	ECBT1E103ZF	25V 0.01U [M]
C721	RCE1AKA101BG	10V 100U [M]
C723	ECBT1E103ZF	25V 0.01U [M]
C725	RCE1CKA100BG	16V 10U [M]
C726	ECBT1E103ZF	25V 0.01U [M]
C731	ECBT1H102KB5	50V 1000P [M]
C732	ECBT1E223ZF	25V 0.022U [M]
C734	RCE1CKA100BG	16V 10U [M]
C736⚠	ECA1EM101B	25V 100U [M]
C737, 738⚠	ECA1HM101B	50V 100U [M]
C739⚠	ECA1JM101B	63V 100U [M]
C740	RCE1CKA100BG	16V 10U [M]
C741	ECBT1H104ZF5	50V 0.1U [M]
C901	ECBT1H104ZF5	50V 0.1U [M]
C902	ECA0JM102B	6.3V 1000U [M]
C903	ECBT1E103ZF	25V 0.01U [M]
C905-908	ECBT1H471KB5	50V 470P [M]
C909	ECBT1H102KB5	50V 1000P [M]
C910	ECBT1H150JC5	50V 15P [M]
C911	ECBT1H180JC5	50V 18P [M]
C912	ECBT1H104ZF5	50V 0.1U [M]
C913	RCE1CKA100BG	16V 10U [M]
C914	ECEA1HKA2R2B	50V 2.2U [M]
C915	ECBT1E103ZF	25V 0.01U [M]
C916	ECA0JKF101B	6.3V 100U [M]
C917	ECBT1E103ZF	25V 0.01U [M]
C918	ECEA0JKA221B	6.3V 220U [M]
C919, 920	ECEA1HKS2R2B	50V 2.2U [M]
C921	ECBT1H102KB5	50V 1000P [M]
C922	ECEA1VKA330B	35V 33U [M]
C1101, 1102	ECBT1H473ZF5	50V 0.047U [M]
C1103-1106	ECBT1H102KB5	50V 1000P [M]

■ Replacement Parts List (Electrical) [For (EG) and (EP) areas]

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	LA1832MH-TEL	IC	[M]
IC102	LC7218M-TE-L	IC	[M]
IC151	LA2230M-TE-L	IC	[M]
IC301	M62433FP	IC	[M]
IC501	M5218AP	IC	[M]
IC601⚠	RSN308M24	IC	[M]
IC901	M38198MC097F	IC	[M]
		TRANSISTOR(S)	
Q101, 102	2SC2787L	TRANSISTOR	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]
Q106	UN4111	TRANSISTOR	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]
Q110	2SC3311AR	TRANSISTOR	[M]
Q305, 306	2SC3311AIRTA	TRANSISTOR	[M]
Q307, 308	2SD2144S	TRANSISTOR	[M]
Q309, 310	UN4115	TRANSISTOR	[M]
Q503	2SD1450RTA	TRANSISTOR	[M]
Q551	2SA1309AIRTA	TRANSISTOR	[M]
Q554	2SA1309AIRTA	TRANSISTOR	[M]
Q555	2SD2144S	TRANSISTOR	[M]
Q558	2SD2144S	TRANSISTOR	[M]
Q605	2SC3311AIRTA	TRANSISTOR	[M]
Q651⚠	2SB1238QRTV6	TRANSISTOR	[M]
Q652	2SD1859QRTV2	TRANSISTOR	[M]
Q654	2SD1859QRTV2	TRANSISTOR	[M]
Q656	2SC3311AIRTA	TRANSISTOR	[M]
Q701⚠	2SD2374PQAU	TRANSISTOR	[M]
Q702⚠	2SB1548PQAU	TRANSISTOR	[M]
Q703⚠	2SD2374PQAU	TRANSISTOR	[M]
Q704	UN4211	TRANSISTOR	[M]
Q707⚠	2SB621A-R	TRANSISTOR	[M]
Q708⚠	2SD2137PQTA	TRANSISTOR	[M]
Q709	2SD2144S	TRANSISTOR	[M]
Q711	2SB1417PQTA	TRANSISTOR	[M]
Q712⚠	2SB1548PQAU	TRANSISTOR	[M]
Q718	UN4111	TRANSISTOR	[M]
Q719, 720	2SD1450RTA	TRANSISTOR	[M]
Q721	2SC3311AIRTA	TRANSISTOR	[M]
Q722	2SA1309AIRTA	TRANSISTOR	[M]
Q723⚠	2SC3940AQSTA	TRANSISTOR	[M]
Q724	UN4211	TRANSISTOR	[M]
Q725⚠	2SC3311AIRTA	TRANSISTOR	[M]
Q901	UN4214TA	TRANSISTOR	[M]
Q902-904	2SC3311AIRTA	TRANSISTOR	[M]
Q905, 906	UN411FTA	TRANSISTOR	[M]
		DIODE(S)	
D101⚠	MA4051MTA	DIODE	[M]
D102	MA165	DIODE	[M]
D151	MA4051MTA	DIODE	[M]
D152	MA165	DIODE	[M]
D331	MA4051-L	DIODE	[M]
D551, 552	MA165	DIODE	[M]
D555	MA4100MTA	DIODE	[M]
D558	MA165	DIODE	[M]
D601, 602	SB360L6508	DIODE	[M]
D651⚠	MA4200M	DIODE	[M]
D652, 653⚠	MA4140M	DIODE	[M]
D657, 658	MA165	DIODE	[M]
D701-704⚠	1N5402BF	DIODE	[M]
D705-708⚠	RL1N4003N02	DIODE	[M]
D709	MA165	DIODE	[M]
D710	MA4051MTA	DIODE	[M]
D711	RL1N4003N02	DIODE	[M]
D713, 714⚠	MA185TA	DIODE	[M]
D715	MA165	DIODE	[M]
D717-720⚠	RL1N4003N02	DIODE	[M]
D721⚠	MA4300M	DIODE	[M]
D723⚠	MA4150M	DIODE	[M]
D724, 725⚠	MA4082LTA	DIODE	[M]
D727⚠	MA4062-H	DIODE	[M]
D730⚠	MA4100MTA	DIODE	[M]
D732-736	MA165	DIODE	[M]
D737⚠	MA4082LTA	DIODE	[M]
D738, 739	MA165	DIODE	[M]
D751, 752⚠	1N5402BF	DIODE	[M]
D753, 754⚠	RL1N4003N02	DIODE	[M]
D901, 902	1SS291TA	DIODE	[M]
D903, 904	MA165	DIODE	[M]
D905	1SS291TA	DIODE	[M]
D906, 907	MA165	DIODE	[M]
D908	SPR505MDTT	L. E. D.	[M]
D909	MA165	DIODE	[M]
D931	MA165	DIODE	[M]
D933, 934	MA165	DIODE	[M]
D936	MA165	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D943	MA165	DIODE	[M]
D971, 972	MA165	DIODE	[M]
D973	MA4039MTA	DIODE	[M]
		VARIABLE RESISTOR(S)	
VR151	EVNDCBA03B53	V. R	[M]
VR901	EVQVBXFK124B	V. R	[M]
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Z120	RAL0019	FM FRONT END	[M]
Z901	RCDGP1U28XD	COMPONENT COMBINATION	[M]
		COIL(S)	
L101	ELESNR68MA	COIL	[M]
L103	ELEXTR47MA9	COIL	[M]
L104	ELEXT1R0KA9	COIL	[M]
L105, 106	ELELN822KL	COIL	[M]
L151	SLM1B10M-1M	COIL	[M]
L161	ELEXT101KA9	COIL	[M]
L191	ELESNR68MA	COIL	[M]
L601, 602	SLQY07G-40	COIL	[M]
L701⚠	RLQZ271M-K	COIL	[M]
L901	RLQA100JT-Y	COIL	[M]
		TRANSFORMER(S)	
T501⚠	RTP2N5B009	POWER TRANSFORMER	[M]
		FILTER(S)	
CF201	RLFFETNGD01L	CERAMIC FILTER	[M]
CF202	RLFFETMGD01L	CERAMIC FILTER	[M]
		OSCILLATOR(S)	
X101	RSXZ456KM07M	OSCILLATOR	[M]
X102	RLFDGT05DD	OSCILLATOR	[M]
X103	RSXC7M20S05T	OSCILLATOR	[M]
X151	RSXZ456KM07M	OSCILLATOR	[M]
X901	EF0EC6004T4	OSCILLATOR	[M]
X902	RSXD32K7S02	OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0234-F	DISPLAY TUBE	[M]
		FUSE(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
F1⚠	XBA2C12TB0	FUSE	[M]
		SWITCH(ES)	
S901-914	EVQ21405R	SW	[M]
		CONNECTOR(S)	
CN201	RJU057W010	CONNECTOR(10P)	[M]
CN203	RJU057W012	CONNECTOR(12P)	[M]
CN701-709	RJS1A1101T1	CONNECTOR(1P)	[M]
CN711-713	RJS1A1101T1	CONNECTOR(1P)	[M]
CN715	RJU057W012	CONNECTOR(12P)	[M]
CN721	RJS9T5ZA	CONNECTOR(9P)	[M]
CN904	RJS2A2105	CONNECTOR(5P)	[M]
CN101B	RJU057W007	CONNECTOR(7P)	[M]
CN102B	RJU057W007	CONNECTOR(7P)	[M]
CN501B	RJU057W007	CONNECTOR(7P)	[M]
CP103B	RJT057W007-1	CONNECTOR(7P)	[M]
CP201	RJT057W010-1	CONNECTOR(10P)	[M]
CP203	RJT057W012-1	CONNECTOR(12P)	[M]
CP715	RJT057W012-1	CONNECTOR(12P)	[M]
CP101B	RJT057W007-1	CONNECTOR(7P)	[M]
CP102B	RJT057W007-1	CONNECTOR(7P)	[M]
		EARTH TERMINAL(S)	
E601	SNE1004-2	EARTH TERMINAL	[M]
E603	SNE1004-2	EARTH TERMINAL	[M]
		FUSE HOLDER(S)	
FC1, 2	EYF52BC	FUSE HOLDER	[M]
		RELAY(S)	
RL701⚠	RSY0030-C	RELAY	[M]
		JACK(S)	
JK101	RJH5210M	ANTENNA	[M]
JK201	RJT065K19	SYSTEM	[M]
JK203	SJF3068-7N	EXT IN	[M]
JK204	SJF3069-5N	PHONO/EXT OUT	[M]
JK501	RJR0054M	SPEAKERS	[M]
JK701⚠	SJS9236	AC INLET	[M]
JK903	RJJ37TN01-C	HEADPHONES	[M]
		FUSE(S)	
F1⚠	XBA2C12TB0S	FUSE	[M]

■ Resistors and Capacitors [For (EG) and (EP) areas]

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R103	ERDS2TJ101	1/4W 100 [M]
R104	ERDS2TJ103	1/4W 10K [M]
R105	ERDS2TJ471	1/4W 470 [M]
R106	ERDS2TJ474	1/4W 470K [M]
R107	ERDS2TJ331	1/4W 330 [M]
R108	ERDS2TJ474	1/4W 470K [M]
R109	ERDS2TJ331	1/4W 330 [M]
R110	ERDS2TJ102	1/4W 1K [M]
R112	ERDS2TJ104	1/4W 100K [M]
R113	ERDS2TJ103	1/4W 10K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]
R115	ERDS2TJ561	1/4W 560 [M]
R116	ERDS2TJ102	1/4W 1K [M]
R117	ERDS2TJ823T	1/4W 82K [M]
R118	ERDS2TJ472	1/4W 4.7K [M]
R119	ERDS2TJ103	1/4W 10K [M]
R120	ERDS2TJ473	1/4W 47K [M]
R121	ERDS2TJ332	1/4W 3.3K [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]
R124	ERDS2TJ271	1/4W 270 [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]
R127	ERDS2TJ103	1/4W 10K [M]
R128	ERDS2TJ820	1/4W 82 [M]
R129	ERDS2TJ473	1/4W 47K [M]
R130	ERDS2TJ103	1/4W 10K [M]
R132	ERDS2TJ103	1/4W 10K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]
R138	ERDS2TJ103	1/4W 10K [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]
R145, 146	ERDS2TJ821	1/4W 820 [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]
R149	ERDS2TJ680T	1/4W 68 [M]
R151	ERDS2TJ564	1/4W 560K [M]
R152	ERDS2TJ102	1/4W 1K [M]
R153	ERDS2TJ155	1/4W 1.5M [M]
R154	ERDS2TJ102	1/4W 1K [M]
R155	ERDS2TJ562	1/4W 5.6K [M]
R156	ERDS2TJ471	1/4W 470 [M]
R157	ERDS2TJ820	1/4W 82 [M]
R158	ERDS2TJ103	1/4W 10K [M]
R159	ERDS2TJ104	1/4W 100K [M]
R160, 161	ERDS2TJ102	1/4W 1K [M]
R162	ERDS2TJ103	1/4W 10K [M]
R163	ERDS2TJ223	1/4W 22K [M]

Ref. No.	Part No.	Values & Remarks
R164	ERDS2TJ332	1/4W 3.3K [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]
R175	ERDS2TJ102	1/4W 1K [M]
R176	ERDS2TJ391	1/4W 390 [M]
R177	ERDS2TJ472	1/4W 4.7K [M]
R201, 202⚠	ERDS2FJ752	1/4W 7.5K [M]
R217, 218	ERDS2TJ562	1/4W 5.6K [M]
R221, 222	ERDS2FJ752	1/4W 7.5K [M]
R223, 224	ERDS2TJ562	1/4W 5.6K [M]
R225, 226	ERDS2TJ104	1/4W 100K [M]
R227, 228	ERDS2TJ222	1/4W 2.2K [M]
R229, 230	ERDS2TJ822	1/4W 8.2K [M]
R231-234	ERDS2TJ682T	1/4W 6.8K [M]
R235, 236	ERDS2TJ102	1/4W 1K [M]
R239-242	ERDS2TJ102	1/4W 1K [M]
R243, 244	ERDS2TJ152	1/4W 1.5K [M]
R245, 246	ERDS2TJ332	1/4W 3.3K [M]
R249, 250	ERDS2TJ101	1/4W 100 [M]
R251	ERDS2TJ222	1/4W 2.2K [M]
R253, 254	ERDS2TJ104	1/4W 100K [M]
R255, 256	ERDS2TJ123	1/4W 12K [M]
R257, 258	ERDS2TJ562	1/4W 5.6K [M]
R261, 262⚠	ERD25FVJ1R0T	1/4W 1.0 [M]
R301	ERDS2TJ223	1/4W 22K [M]
R302	ERDS2TJ472	1/4W 4.7K [M]
R303, 304	ERDS2TJ222	1/4W 2.2K [M]
R305, 306	ERDS2TJ152	1/4W 1.5K [M]
R307, 308	ERDS2TJ104	1/4W 100K [M]
R309, 310	ERDS2TJ102	1/4W 1K [M]
R311, 312	ERDS2TJ104	1/4W 100K [M]
R313, 314	ERDS2EJ121	1/4W 120 [M]
R315	ERDS2TJ104	1/4W 100K [M]
R316	ERDS2TJ222	1/4W 2.2K [M]
R317	ERDS2TJ105T	1/4W 1M [M]
R318	ERDS2TJ153	1/4W 15K [M]
R324	ERDS2TJ223	1/4W 22K [M]
R326	ERDS2TJ332	1/4W 3.3K [M]
R327	ERDS2TJ392T	1/4W 3.9K [M]
R328	ERDS2TJ332	1/4W 3.3K [M]
R329	ERDS2TJ103	1/4W 10K [M]
R330	ERDS2TJ332	1/4W 3.3K [M]
R331	ERDS2TJ102	1/4W 1K [M]
R332-334	ERDS2TJ222	1/4W 2.2K [M]
R335, 336	ERDS2TJ683	1/4W 68K [M]
R338	ERDS2TJ392T	1/4W 3.9K [M]
R343	ERDS2TJ334	1/4W 330K [M]
R360	ERDS2TJ223	1/4W 22K [M]
R364	ERDS2TJ103	1/4W 10K [M]

Ref. No.	Part No.	Values & Remarks
R365	ERDS2TJ223	1/4W 22K [M]
R380	ERDS2TJ153	1/4W 15K [M]
R503, 504	ERDS2TJ333	1/4W 33K [M]
R505, 506	ERDS2TJ153	1/4W 15K [M]
R507, 508	ERDS2TJ332	1/4W 3.3K [M]
R509-512	ERDS2TJ560T	1/4W 56 [M]
R513, 514	ERDS2TJ103	1/4W 10K
R551	ERDS2TJ183T	1/4W 18K [M]
R552	ERDS2TJ473	1/4W 47K [M]
R555	ERDS2TJ223	1/4W 22K [M]
R556	ERDS2TJ104	1/4W 100K [M]
R557	ERDS2TJ103	1/4W 10K [M]
R558	ERDS2TJ102	1/4W 1K [M]
R559	ERDS2TJ472	1/4W 4.7K [M]
R561	ERDS2TJ104	1/4W 100K [M]
R562	ERDS2TJ102	1/4W 1K [M]
R563	ERDS2TJ332	1/4W 3.3K [M]
R564	ERDS2TJ273	1/4W 27K [M]
R570	ERDS2TJ335T	1/4W 3.3M [M]
R591	ERDS2TJ473	1/4W 47K [M]
R604, 605	ERDS2TJ103	1/4W 10K [M]
R619, 620	ERDS2TJ563	1/4W 56K [M]
R623	ERDS2TJ684	1/4W 680K [M]
R624	ERDS2TJ223	1/4W 22K [M]
R628	ERDS2TJ184T	1/4W 180K [M]
R629, 630	ERDS2TJ100	1/4W 10 [M]
R631	ERDS2TJ224T	1/4W 220K [M]
R632, 633	ERDS2TJ563	1/4W 56K [M]
R637	ERDS2TJ154	1/4W 150K [M]
R638	ERDS2TJ684	1/4W 680K [M]
R639-642⚠	ERDS1FJ100	1/2W 10 [M]
R647, 648	ERQ16NKWR15E	1/6W 0.15 [M]
R651	ERDS2TJ222	1/4W 2.2K [M]
R654	ERDS2TJ222	1/4W 2.2K [M]
R655, 656	ERDS2TJ183T	1/4W 18K [M]
R667	ERDS2TJ331	1/4W 330 [M]
R701, 702	ERDS2TJ273	1/4W 27K [M]
R703, 704	ERDS2TJ101	1/4W 100 [M]
R707⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R708	ERDS2TJ472	1/4W 4.7K [M]
R712	ERDS2TJ152	1/4W 1.5K [M]
R713, 714	ERDS2TJ332	1/4W 3.3K [M]
R715	ERDS2TJ183T	1/4W 18K [M]
R717	ERDS2TJ473	1/4W 47K [M]
R721⚠	ERD2FCJ4R7	1/4W 4.7 [M]
R722⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R723	ERDS2TJ562	1/4W 5.6K [M]
R724	ERDS2TJ152	1/4W 1.5K [M]
R725, 726	ERDS2TJ100	1/4W 10 [M]

Ref. No.	Part No.	Values & Remarks
R727	ERDS2TJ152	1/4W 1.5K [M]
R729	ERDS2TJ221	1/4W 220 [M]
R735⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R736	ERDS2TJ102	1/4W 1K [M]
R737	ERDS2TJ221	1/4W 220 [M]
R738	ERDS2TJ392T	1/4W 3.9K [M]
R739	ERDS2TJ473	1/4W 47K [M]
R748	ERDS2TJ102	1/4W 1K [M]
R749	ERDS2TJ271	1/4W 270 [M]
R755⚠	ERDS1FVJ8R2T	1/2W 8.2 [M]
R756⚠	ERDS1FJ4R7	1/2W 4.7 [M]
R757-759	ERDS2TJ103	1/4W 10K [M]
R761, 762	ERDS2TJ822	1/4W 8.2K [M]
R763	ERDS2TJ472	1/4W 4.7K [M]
R764	ERDS2TJ331	1/4W 330 [M]
R765⚠	ERDS1FVJ561T	1/2W 560 [M]
R766	ERDS2TJ102	1/4W 1K [M]
R767⚠	ERD2FCJ4R7	1/4W 4.7 [M]
R768	ERDS2TJ101	1/4W 100 [M]
R791, 792⚠	RSFMB30KT-L	PROTECTOR [M]
R901	ERDS2TJ821	1/4W 820 [M]
R902	ERDS2TJ102	1/4W 1K [M]
R903	ERDS2TJ122	1/4W 1.2K [M]
R904	ERDS2TJ152	1/4W 1.5K [M]
R905	ERDS2TJ182	1/4W 1.8K [M]
R906	ERDS2TJ222	1/4W 2.2K [M]
R907	ERDS2TJ272T	1/4W 2.7K [M]
R908	ERDS2TJ472	1/4W 4.7K [M]
R909	ERDS2TJ682T	1/4W 6.8K [M]
R910	ERDS2TJ123	1/4W 12K [M]
R911	ERDS2TJ223	1/4W 22K [M]
R912	ERDS2TJ821	1/4W 820 [M]
R919-923	ERDS2TJ103	1/4W 10K [M]
R924-927	ERDS2TJ102	1/4W 1K [M]
R929	ERDS2TJ102	1/4W 1K [M]
R930	ERDS2TJ101	1/4W 100 [M]
R931-936	ERDS2TJ102	1/4W 1K [M]
R937	ERDS2TJ562	1/4W 5.6K [M]
R938	ERDS2TJ102	1/4W 1K [M]
R939	ERDS2TJ152	1/4W 1.5K [M]
R940, 941	ERDS2TJ102	1/4W 1K [M]
R942	ERDS2TJ101	1/4W 100 [M]
R943	ERDS2TJ102	1/4W 1K [M]
R946	ERDS2TJ102	1/4W 1K [M]
R949	ERDS2TJ472	1/4W 4.7K [M]
R950	ERDS2TJ101	1/4W 100 [M]
R951	ERDS2TJ334	1/4W 330K [M]
R952	ERDS2TJ106T	1/4W 10M [M]
R953	ERDS2TJ101	1/4W 100 [M]
R954	ERDS2TJ104	1/4W 100K [M]
R955	ERDS2TJ824	1/4W 820K [M]
R956-958	ERDS2TJ102	1/4W 1K [M]
R959	ERDS2TJ471	1/4W 470 [M]
R960	ERDS2TJ152	1/4W 1.5K [M]
R961, 962	ERDS2TJ223	1/4W 22K [M]
R963, 964	ERDS2TJ103	1/4W 10K [M]
R965	ERDS2TJ472	1/4W 4.7K [M]
R966	ERDS2TJ103	1/4W 10K [M]
R967	ERDS2TJ473	1/4W 47K [M]
R968	ERDS2TJ103	1/4W 10K [M]
R969, 970	ERDS2TJ472	1/4W 4.7K [M]
R971	ERDS2TJ473	1/4W 47K [M]
R972	ERDS2TJ223	1/4W 22K [M]
R974	ERDS2TJ101	1/4W 100 [M]
R975	ERDS2TJ181T	1/4W 180 [M]
R977-981	ERDS2TJ104	1/4W 100K [M]
R984, 985	ERDS2TJ473	1/4W 47K [M]
R986-988	ERDS2TJ102	1/4W 1K [M]
R989, 990	ERDS2TJ393	1/4W 39K [M]
R991	ERDS2TJ473	1/4W 47K [M]
R993, 994	ERDS2TJ104	1/4W 100K [M]
R996, 997	ERDS2TJ151	1/4W 150 [M]
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U [M]
C103	ECBT1C103NS5	16V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]
C106	ECBT1C103NS5	16V 0.01U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]
C112	ECBT1C103NS5	16V 0.01U [M]
C113	ECBT1H102KB5	50V 1000P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]
C115	ECEA1EKA4R7B	25V 4.7U [M]
C116	ECBT1C822KS5	16V 8200P [M]
C117	ECQP1391JZ	100V 390P [M]
C118, 119	ECFR1C103KR	16V 0.01U [M]
C120, 121	ECEA1HKA010B	50V 1U [M]
C122	ECEA1HKA2R2B	50V 2.2U [M]
C123	ECEA1HKA010B	50V 1U [M]
C124	ECBT1H102KB5	50V 1000P [M]
C125	ECBT1H150JC5	50V 15P [M]
C126	ECBT1H473ZF5	50V 0.047U [M]
C127	ECEA1CKA220B	16V 22U [M]
C128	ECBT1H102KB5	50V 1000P [M]
C129, 130	ECEA0JKA101B	6.3V 100U [M]
C132	ECBT1H102KB5	50V 1000P [M]
C133, 134	ECBT1H270JU5	50V 27P [M]
C135, 136	ECBT1C103KS5	16V 0.01U [M]
C137, 138	ECBT1H561KB5	50V 560P [M]
C139, 140	ECBT1C682KR5	16V 6800P [M]
C141-144	ECEA1HKA010B	50V 1U [M]
C145	ECBT1H220JC5	50V 22P [M]
C148	ECBT1C103NS5	16V 0.01U [M]
C149	ECBT1H104ZF5	50V 0.1U [M]
C151	ECEA0JKA101B	6.3V 100U [M]
C152	ECEA1CKA220B	16V 22U [M]
C153, 154	ECBT1C332KR5	16V 3300P [M]
C155	ECBT1C103KS5	16V 0.01U [M]
C156	ECBT1H102KB5	50V 1000P [M]
C157	RCE1CKA100BG	16V 10U [M]
C158	ECEA1EKA4R7B	25V 4.7U [M]
C159	RCE1CKA100BG	16V 10U [M]
C160	ECFR1C223KR	16V 0.022U [M]
C161	ECFR1C333KR	16V 0.033U [M]
C162	ECBT1C682KR5	16V 6800P [M]
C163	ECFR1C333KR	16V 0.033U [M]
C164	ECBT1H102KB5	50V 1000P [M]
C165	ECEA1EKA4R7B	25V 4.7U [M]
C171, 172	ECBT1H102KB5	50V 1000P [M]
C173	ECEA1CKA220B	16V 22U [M]
C174	RCE1CKA100BG	16V 10U [M]
C181	ECBT1H471KB5	50V 470P [M]
C196	ECBT1H102KB5	50V 1000P [M]
C201, 202	ECBT1H180J5	50V 18P [M]
C219-226	ECBT1H101KB5	50V 100P [M]
C229-234	ECBT1H101KB5	50V 100P [M]
C235, 236	ECBT1H104ZF5	50V 0.1U [M]
C301	ECBT1H102KB5	50V 1000P [M]
C302, 303	ECBT1H561KB5	50V 560P [M]
C309	ECEA1HKAR22B	50V 0.22U [M]
C310	ECFR1C393KR	16V 0.039U [M]
C312	ECFR1C823MR	16V 0.082U [M]
C313	ECFR1C103KR	16V 0.01U [M]
C315	ECFR1C223KR	16V 0.022U [M]
C316	ECBT1C332KR5	16V 3300P [M]
C318	ECBT1C682KR5	16V 6800P [M]
C319	ECBT1H102KB5	50V 1000P [M]
C320	ECBA1H681KB5	50V 680P [M]
C321	ECBT1C332KR5	16V 3300P [M]
C322	ECQV1H333JM3	50V 0.033U [M]
C324	ECFR1C683KR	16V 0.068U [M]
C325	ECQV1H154JM3	50V 0.15U [M]
C326	ECBT1H102KB5	50V 1000P [M]
C327	ECBT1H471KB5	50V 470P [M]
C328	RCE1CKA470BG	16V 47U [M]
C329	ECEA1HKA2R2B	50V 2.2U [M]
C330	ECBA1H681KB5	50V 680P [M]
C331	ECBT1H104ZF5	50V 0.1U [M]
C332-334	ECBT1H470J5	50V 47P [M]
C336	ECBT1H104ZF5	50V 0.1U [M]
C337	RCE1CKA470BG	16V 47U [M]
C338	ECBT1H471KB5	50V 470P [M]

Ref. No.	Part No.	Values & Remarks
C339	ECBT1H102KB5	50V 1000P [M]
C340	ECQV1H154JM3	50V 0.15U [M]
C341	ECFR1C683KR	16V 0.068U [M]
C342	ECQV1H333JM3	50V 0.033U [M]
C343	ECEA1HKA2R2B	50V 2.2U [M]
C344	ECBT1C332KR5	16V 3300P [M]
C346	ECBT1H102KB5	50V 1000P [M]
C347	ECBT1C682KR5	16V 6800P [M]
C349	ECBT1C332KR5	16V 3300P [M]
C350	ECFR1C223KR	16V 0.022U [M]
C352	ECFR1C103KR	16V 0.01U [M]
C353	ECFR1C823MR	16V 0.082U [M]
C355	ECFR1C393KR	16V 0.039U [M]
C356	ECEA1HKAR22B	50V 0.22U [M]
C357, 358	ECQV1H683JM3	50V 0.068U [M]
C359	RCE1HKA3R3BG	50V 3.3U [M]
C360	RCE1HKA4R7BG	50V 4.7U [M]
C364	ECBT1C152KR5	16V 1500P [M]
C365	ECQV1H154JM3	50V 0.15U [M]
C372	ECBT1H104ZF5	50V 0.1U [M]
C385, 386	ECEA1HKAR22B	50V 0.22U [M]
C395, 396	ECBT1H473ZF5	50V 0.047U [M]
C501-506	ECBT1H101KB5	50V 100P [M]
C507, 508	RCE1CKA100BG	16V 10U [M]
C509-512	ECBT1E103ZF	25V 0.01U [M]
C551	ECEA1HKA2R2B	50V 2.2U [M]
C552	ECBT1E103ZF	25V 0.01U [M]
C553	ECEA1HKAR68B	50V 0.68U [M]
C554	ECA1AM221B	10V 220U [M]
C557, 558	ECFR1C393KR	16V 0.039U [M]
C604, 605	RCE1CKA100BG	16V 10U [M]
C607, 608	ECBT1C122KR5	16V 1200P [M]
C613, 614	ECBT1H150JC5	50V 15P [M]
C615	ECEA2AU010	100V 1U [M]
C616	ECA1JM330B	63V 33U [M]
C617	ECEA1HKNR47B	50V 0.47U [M]
C618	ECA1HM101B	50V 100U [M]
C620, 621	ECQV1H473JM3	50V 0.047U [M]
C631, 632	ECBT1H102KB5	50V 1000P [M]
C633	ECBT1C103KS5	16V 0.01U [M]
C655	ECEA2AU3R3B	100V 3.3U [M]
C656	ECBT1E103ZF	25V 0.01U [M]
C657	ECBT1H104ZF5	50V 0.1U [M]
C701, 702⚠	ECA1VM472E	35V 4700U [M]
C703, 704⚠	ECA1VM332E	35V 3300U [M]
C705	RCE1CKA100BG	16V 10U [M]
C706	RCE1VKA100BG	35V 10U [M]
C707	ECBT1E103ZF	25V 0.01U [M]
C708	RCE1CKA100BG	16V 10U [M]
C709	ECBT1H104ZF5	50V 0.1U [M]
C710	ECBT1E103ZF	25V 0.01U [M]
C711	RCE1EM471BV	25V 470U [M]
C714	ECBT1H102KB5	50V 1000P [M]
C715⚠	ECA1EM472E	25V 4700U [M]
C717	ECEA1CKA330B	16V 33U [M]
C718	RCE1AKA101BG	10V 100U [M]
C719, 720	ECBT1E103ZF	25V 0.01U [M]
C721	RCE1AKA101BG	10V 100U [M]
C723	ECBT1E103ZF	25V 0.01U [M]
C725	RCE1CKA100BG	16V 10U [M]
C726	ECBT1E103ZF	25V 0.01U [M]
C731	ECBT1H102KB5	50V 1000P [M]
C732	ECBT1E223ZF	25V 0.022U [M]
C734	RCE1CKA100BG	16V 10U [M]
C736⚠	ECA1EM101B	25V 100U [M]
C737, 738⚠	ECA1HM101B	50V 100U [M]
C739⚠	ECA1JM101B	63V 100U [M]
C740	RCE1CKA100BG	16V 10U [M]
C741	ECBT1H104ZF5	50V 0.1U [M]
C901	ECBT1H104ZF5	50V 0.1U [M]
C902	ECA0JM102B	6.3V 1000U [M]
C903	ECBT1E103ZF	25V 0.01U [M]
C905-908	ECBT1H471KB5	50V 470P [M]
C909	ECBT1H102KB5	50V 1000P [M]
C910	ECBT1H150JC5	50V 15P [M]
C911	ECBT1H180JC5	50V 18P [M]
C912	ECBT1H104ZF5	50V 0.1U [M]
C913	RCE1CKA100BG	16V 10U [M]
C914	ECEA1HKA2R2B	50V 2.2U [M]
C915	ECBT1E103ZF	25V 0.01U [M]
C916	ECA0JKF101B	6.3V 100U [M]
C917	ECBT1E103ZF	25V 0.01U [M]
C918	ECEA0JKA221B	6.3V 220U [M]
C919, 920	ECEA1HKS2R2B	50V 2.2U [M]
C921	ECBT1H102KB5	50V 1000P [M]
C922	ECEA1VKA330B	35V 33U [M]
C1101, 1102	ECBT1H473ZF5	50V 0.047U [M]
C1103-1106	ECBT1H102KB5	50V 1000P [M]

■ Replacement Parts List (Electrical) [For (GC) area]

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	LA1832MH-TEL	IC	[M]
IC102	LC7218M-TE-L	IC	[M]
IC301	M62433FP	IC	[M]
IC401	TA2011S	IC	[M]
IC402	BU9255FS-E2	IC	[M]
IC501	M5218AP	IC	[M]
IC601⚠	RSN307M42	IC	[M]
IC801	LV1030	IC	[M]
IC803	M62425FPE1	IC	[M]
IC901	M38198MC099F	IC	[M]
		TRANSISTOR(S)	
Q101, 102	2SC2787L	TRANSISTOR	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]
Q106	UN411FTA	TRANSISTOR	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]
Q301	2SD2144S	TRANSISTOR	[M]
Q305, 306	2SC3311AIRTA	TRANSISTOR	[M]
Q307, 308	2SD2144S	TRANSISTOR	[M]
Q309, 310	UN4115	TRANSISTOR	[M]
Q401	2SC3311AIRTA	TRANSISTOR	[M]
Q503	2SD1450RTA	TRANSISTOR	[M]
Q551	2SA1309AIRTA	TRANSISTOR	[M]
Q553	2SD2144S	TRANSISTOR	[M]
Q554	2SA1309AIRTA	TRANSISTOR	[M]
Q555	2SD2144S	TRANSISTOR	[M]
Q556	2SC3311AIRTA	TRANSISTOR	[M]
Q557	2SA1309AIRTA	TRANSISTOR	[M]
Q558	2SD2144S	TRANSISTOR	[M]
Q603-605	2SC3311AIRTA	TRANSISTOR	[M]
Q656	2SC3311AIRTA	TRANSISTOR	[M]
Q701⚠	2SD2374PQAU	TRANSISTOR	[M]
Q702⚠	2SB1548PQAU	TRANSISTOR	[M]
Q703⚠	2SD2374PQAU	TRANSISTOR	[M]
Q704	UN4211	TRANSISTOR	[M]
Q707⚠	2SB621A-R	TRANSISTOR	[M]
Q708⚠	2SD2137PQTA	TRANSISTOR	[M]
Q709	2SD2144S	TRANSISTOR	[M]
Q711	2SB1417PQTA	TRANSISTOR	[M]
Q712⚠	2SB1548PQAU	TRANSISTOR	[M]
Q718	UN4111	TRANSISTOR	[M]
Q719, 720	2SD1450RTA	TRANSISTOR	[M]
Q721	2SC3311AIRTA	TRANSISTOR	[M]
Q722	2SA1309AIRTA	TRANSISTOR	[M]
Q723⚠	2SC3940AQSTA	TRANSISTOR	[M]
Q724	UN4211	TRANSISTOR	[M]
Q725⚠	2SC3311AIRTA	TRANSISTOR	[M]
Q801, 802	2SD1450RTA	TRANSISTOR	[M]
Q803, 804	UN4115	TRANSISTOR	[M]
Q805, 806	2SD1450RTA	TRANSISTOR	[M]
Q807	UN4115	TRANSISTOR	[M]
Q811, 812⚠	2SD2137PQTA	TRANSISTOR	[M]
Q901	UN4214TA	TRANSISTOR	[M]
Q902-904	2SC3311AIRTA	TRANSISTOR	[M]
Q905, 906	UN411FTA	TRANSISTOR	[M]
		DIODE(S)	
D101⚠	MA4051MTA	DIODE	[M]
D102	MA165	DIODE	[M]
D303	MA165	DIODE	[M]
D331	MA4051-L	DIODE	[M]
D401	MA165	DIODE	[M]
D402	MA4051MTA	DIODE	[M]
D551, 552	MA165	DIODE	[M]
D553	MA700TA	DIODE	[M]
D554	MA165	DIODE	[M]
D555	MA4100MTA	DIODE	[M]
D557, 558	MA165	DIODE	[M]
D559, 560	MA4020LTA	DIODE	[M]
D601, 602	SB360L6508	DIODE	[M]
D657, 658	MA165	DIODE	[M]
D701-704⚠	1N5402BF	DIODE	[M]
D705-708⚠	RL1N4003N02	DIODE	[M]
D709	MA165	DIODE	[M]
D710	MA4051MTA	DIODE	[M]
D711	RL1N4003N02	DIODE	[M]
D713, 714⚠	MA185TA	DIODE	[M]
D715	MA165	DIODE	[M]
D717-720⚠	RL1N4003N02	DIODE	[M]
D721⚠	MA4300M	DIODE	[M]
D723⚠	MA4150M	DIODE	[M]
D724, 725⚠	MA4082LTA	DIODE	[M]
D727⚠	MA4062-H	DIODE	[M]
D730⚠	MA4100MTA	DIODE	[M]
D732-736	MA165	DIODE	[M]
D737⚠	MA4082LTA	DIODE	[M]
D738, 739	MA165	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D751, 752⚠	1N5402BF	DIODE	[M]
D753, 754⚠	RL1N4003N02	DIODE	[M]
D801-804	MA165	DIODE	[M]
D808⚠	MA4120	DIODE	[M]
D901, 902	1SS291TA	DIODE	[M]
D903, 904	MA165	DIODE	[M]
D905	1SS291TA	DIODE	[M]
D906, 907	MA165	DIODE	[M]
D908	SPR505MDTT	L. E. D.	[M]
D909	MA165	DIODE	[M]
D931	MA165	DIODE	[M]
D934	MA165	DIODE	[M]
D935-937	MA165	DIODE	[M]
D943	MA165	DIODE	[M]
D971, 972	MA165	DIODE	[M]
D973	MA4039MTA	DIODE	[M]
		VARIABLE RESISTOR(S)	
VR401	EVUE27FK3B53	V. R	[M]
VR901	EVQVBXFK124B	V. R	[M]
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Z120	RAL0006	FM FRONT END	[M]
Z901	RCDGP1U28XD	COMPONENT COMBINATION	[M]
		COIL(S)	
L101	ELESNR68MA	COIL	[M]
L103	ELEXTR47MA9	COIL	[M]
L105, 106	ELELN822KL	COIL	[M]
L191	ELESNR68MA	COIL	[M]
L601-604	SLQY07G-40	COIL	[M]
L801	RLQA100JT-Y	COIL	[M]
L901	RLQA100JT-Y	COIL	[M]
		TRANSFORMER(S)	
T501⚠	RTP2M5E011	POWER TRANSFORMER	[M]
		FILTER(S)	
CF201, 202	RLFFETWND01M	CERAMIC FILTER	[M]
		OSCILLATOR(S)	
X101	RSXZ456KM07M	OSCILLATOR	[M]
X102	RLFDGT05DD	OSCILLATOR	[M]
X103	RSXC7M20S05T	OSCILLATOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
X801	EF0EC8004T4	OSCILLATOR	[M]
X901	EF0EC6004T4	OSCILLATOR	[M]
X902	RSXD32K7S02	OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0234-F	DISPLAY TUBE	[M]
		FUSE(S)	
F1⚠	XBA2C12TB0S	FUSE, T2A	[M]
F2⚠	XBA2C25TB0	FUSE, T1A	[M]
		SWITCH(ES)	
S701⚠	ESE37314	SW	[M]
S901-914	EVQ21405R	SW	[M]
		CONNECTOR(S)	
CN201	RJU057W010	CONNECTOR(10P)	[M]
CN203	RJU057W012	CONNECTOR(12P)	[M]
CN701-709	RJS1A1101T1	CONNECTOR(1P)	[M]
CN711-715	RJS1A1101T1	CONNECTOR(1P)	[M]
CN715A	RJU057W012	CONNECTOR(12P)	[M]
CN716-719	RJS1A1101T1	CONNECTOR(1P)	[M]
CN720A	RJP1A4103	CONNECTOR(2P)	[M]
CN720	RJS1A1101T1	CONNECTOR(1P)	[M]
CN721	RJS9T5ZA	CONNECTOR(9P)	[M]
CN801	RJU057W009	CONNECTOR(9P)	[M]
CN802	RJU057W008	CONNECTOR(8P)	[M]
CN904, 905	RJS2A2105	CONNECTOR(5P)	[M]
CN101B	RJU057W007	CONNECTOR(7P)	[M]
CN102B	RJU057W007	CONNECTOR(7P)	[M]
CP201	RJT057W010-1	CONNECTOR(10P)	[M]
CP203	RJT057W012-1	CONNECTOR(12P)	[M]
CP715	RJT057W012-1	CONNECTOR(12P)	[M]
CP801	RJT057W009-1	CONNECTOR(9P)	[M]
CP802	RJT057W008-1	CONNECTOR(8P)	[M]
CP101B	RJT057W007-1	CONNECTOR(7P)	[M]
CP102B	RJT057W007-1	CONNECTOR(7P)	[M]
		EARTH TERMINAL(S)	
E601	SNE1004-2	EARTH TERMINAL	[M]
E603	SNE1004-2	EARTH TERMINAL	[M]
		FUSE HOLDER(S)	
FC1-4	EYF52BC	FUSE HOLDER	[M]
		RELAY(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
RL701⚠	RSY0030-C	RELAY	[M]
		JACK(S)	
JK101	RJH5404M	ANTENNA	[M]
JK201	RJT065K19	SYSTEM	[M]
JK203	SJF3068-7N	EXT IN	[M]
JK204	SJF3069-5N	PHONO/EXT OUT	[M]
JK501	RJR0054M	SPEAKERS	[M]
JK502	RJH2305	SURROUND/CENTER SPEAKERS	[M]
JK551	SJT3213	FAN MOTOR	[M]
JK701⚠	SJS9236	AC INLET	[M]
JK901	RJJ65MA01	MIC 1	[M]
JK902	RJJ65MA01	MIC 2	[M]
JK903	RJJ37TN01-C	HEADPHONES	[M]

■ Resistors and Capacitors [For (GC) area]

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R103	ERDS2TJ271	1/4W 270 [M]
R104	ERDS2TJ822	1/4W 8.2K [M]
R105	ERDS2TJ471	1/4W 470 [M]
R106	ERDS2TJ474	1/4W 470K [M]
R107	ERDS2TJ331	1/4W 330 [M]
R108	ERDS2TJ474	1/4W 470K [M]
R109	ERDS2TJ331	1/4W 330 [M]
R110	ERDS2TJ102	1/4W 1K [M]
R112	ERDS2TJ104	1/4W 100K [M]
R113	ERDS2TJ103	1/4W 10K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]
R115	ERDS2TJ561	1/4W 560 [M]
R116	ERDS2TJ102	1/4W 1K [M]
R117	ERDS2TJ273	1/4W 27K [M]
R118	ERDS2TJ562	1/4W 5.6K [M]
R119	ERDS2TJ682T	1/4W 6.8K [M]
R120	ERDS2TJ473	1/4W 47K [M]
R121	ERDS2TJ332	1/4W 3.3K [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]
R124	ERDS2TJ271	1/4W 270 [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]
R127	ERDS2TJ103	1/4W 10K [M]
R128	ERDS2TJ820	1/4W 82 [M]
R129	ERDS2TJ473	1/4W 47K [M]
R130	ERDS2TJ103	1/4W 10K [M]
R132	ERDS2TJ103	1/4W 10K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]
R138	ERDS2TJ103	1/4W 10K [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]
R145, 146	ERDS2TJ102	1/4W 1K [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]
R149	ERDS2TJ680T	1/4W 68 [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]
R175	ERDS2TJ102	1/4W 1K [M]
R176	ERDS2TJ391	1/4W 390 [M]
R201, 202⚠	ERDS2FJ752	1/4W 7.5K [M]
R217, 218	ERDS2TJ562	1/4W 5.6K [M]
R221, 222	ERDS2FJ752	1/4W 7.5K [M]
R223, 224	ERDS2TJ562	1/4W 5.6K [M]
R225, 226	ERDS2TJ104	1/4W 100K [M]
R227, 228	ERDS2TJ222	1/4W 2.2K [M]
R229, 230	ERDS2TJ822	1/4W 8.2K [M]
R231-234	ERDS2TJ682T	1/4W 6.8K [M]

Ref. No.	Part No.	Values & Remarks
R235, 236	ERDS2TJ102	1/4W 1K [M]
R239-242	ERDS2TJ102	1/4W 1K [M]
R243, 244	ERDS2TJ152	1/4W 1.5K [M]
R245, 246	ERDS2TJ332	1/4W 3.3K [M]
R249, 250	ERDS2TJ101	1/4W 100 [M]
R251	ERDS2TJ222	1/4W 2.2K [M]
R253, 254	ERDS2TJ104	1/4W 100K [M]
R255, 256	ERDS2TJ123	1/4W 12K [M]
R257, 258	ERDS2TJ562	1/4W 5.6K [M]
R261, 262⚠	ERD25FVJ1R0T	1/4W 1.0 [M]
R301	ERDS2TJ223	1/4W 22K [M]
R302	ERDS2TJ472	1/4W 4.7K [M]
R303, 304	ERDS2TJ222	1/4W 2.2K [M]
R305, 306	ERDS2TJ122	1/4W 1.2K [M]
R307, 308	ERDS2TJ104	1/4W 100K [M]
R309, 310	ERDS2TJ102	1/4W 1K [M]
R311, 312	ERDS2TJ104	1/4W 100K [M]
R313, 314	ERDS2EJ121	1/4W 120 [M]
R315	ERDS2TJ104	1/4W 100K [M]
R316	ERDS2TJ222	1/4W 2.2K [M]
R317	ERDS2TJ105T	1/4W 1M [M]
R318	ERDS2TJ153	1/4W 15K [M]
R319	ERDS2TJ472	1/4W 4.7K [M]
R321	ERDS2TJ104	1/4W 100K [M]
R322	ERDS2TJ222	1/4W 2.2K [M]
R324	ERDS2TJ223	1/4W 22K [M]
R326	ERDS2TJ332	1/4W 3.3K [M]
R327	ERDS2TJ392T	1/4W 3.9K [M]
R328	ERDS2TJ332	1/4W 3.3K [M]
R329	ERDS2TJ103	1/4W 10K [M]
R330	ERDS2TJ332	1/4W 3.3K [M]
R331	ERDS2TJ102	1/4W 1K [M]
R332-334	ERDS2TJ222	1/4W 2.2K [M]
R335, 336	ERDS2TJ683	1/4W 68K [M]
R338	ERDS2TJ392T	1/4W 3.9K [M]
R341, 342	ERDS2TJ222	1/4W 2.2K [M]
R343	ERDS2TJ334	1/4W 330K [M]
R353	ERDS2TJ104	1/4W 100K [M]
R354	ERDS2TJ223	1/4W 22K [M]
R360	ERDS2TJ223	1/4W 22K [M]
R364	ERDS2TJ103	1/4W 10K [M]
R365	ERDS2TJ223	1/4W 22K [M]
R380	ERDS2TJ153	1/4W 15K [M]
R401, 402	ERDS2TJ681	1/4W 680 [M]
R403	ERDS2TJ223	1/4W 22K [M]
R404	ERDS2TJ471	1/4W 470 [M]
R405	ERDS2TJ472	1/4W 4.7K [M]
R406	ERDS2TJ474	1/4W 470K [M]
R407	ERDS2TJ472	1/4W 4.7K [M]

Ref. No.	Part No.	Values & Remarks
R409	ERDS2TJ472	1/4W 4.7K [M]
R410	ERDS2TJ222	1/4W 2.2K [M]
R411	ERDS2TJ331	1/4W 330 [M]
R412	ERDS2TJ105T	1/4W 1M [M]
R415	ERDS2TJ102	1/4W 1K [M]
R416	ERDS2TJ181T	1/4W 180 [M]
R421	ERDS2TJ223	1/4W 22K [M]
R450	ERDS2TJ682T	1/4W 6.8K [M]
R451, 452	ERDS2TJ223	1/4W 22K [M]
R453	ERDS2TJ1R0	1/4W 1.0 [M]
R454	ERDS2TJ103	1/4W 10K [M]
R455	ERDS2TJ223	1/4W 22K [M]
R456	ERDS2EJ121	1/4W 120 [M]
R457	ERDS2TJ822	1/4W 8.2K [M]
R458	ERDS2TJ123	1/4W 12K [M]
R459	ERDS2TJ472	1/4W 4.7K [M]
R460	ERDS2TJ153	1/4W 15K [M]
R461	ERDS2TJ472	1/4W 4.7K [M]
R462	ERDS2TJ103	1/4W 10K [M]
R463	ERDS2TJ223	1/4W 22K [M]
R464	ERDS2TJ103	1/4W 10K [M]
R465	ERDS2TJ104	1/4W 100K [M]
R503, 504	ERDS2TJ333	1/4W 33K [M]
R505, 506	ERDS2TJ153	1/4W 15K [M]
R507, 508	ERDS2TJ332	1/4W 3.3K [M]
R509-512	ERDS2TJ560T	1/4W 56 [M]
R513, 514	ERDS2TJ103	1/4W 10K [M]
R521	ERDS2TJ561	1/4W 560 [M]
R551	ERDS2TJ183T	1/4W 18K [M]
R552	ERDS2TJ473	1/4W 47K [M]
R555	ERDS2TJ223	1/4W 22K [M]
R556	ERDS2TJ104	1/4W 100K [M]
R557	ERDS2TJ472	1/4W 4.7K [M]
R558	ERDS2TJ102	1/4W 1K [M]
R559	ERDS2TJ472	1/4W 4.7K [M]
R560, 561	ERDS2TJ104	1/4W 100K [M]
R563, 564	ERDS2TJ273	1/4W 27K [M]
R566	ERDS2TJ683	1/4W 68K [M]
R567	ERG1SJ220	1W 22 [M]
R568	ERDS2TJ101	1/4W 100 [M]
R569	ERDS2TJ103	1/4W 10K [M]
R570	ERDS2TJ225	1/4W 2.2M [M]
R591	ERDS2TJ473	1/4W 47K [M]
R602, 603	ERDS2TJ221	1/4W 220 [M]
R604, 605	ERDS2TJ103	1/4W 10K [M]
R609, 610	ERDS2TJ563	1/4W 56K [M]
R611, 612	ERDS2TJ332	1/4W 3.3K [M]
R613	ERDS2TJ104	1/4W 100K [M]
R614	ERDS2TJ124T	1/4W 120K [M]

Ref. No.	Part No.	Values & Remarks
R615, 616	ERDS2TJ182	1/4W 1.8K [M]
R619, 620	ERDS2TJ563	1/4W 56K [M]
R621	ERDS2TJ273	1/4W 27K [M]
R622	ERDS2TJ473	1/4W 47K [M]
R623	ERDS2TJ684	1/4W 680K [M]
R624	ERDS2TJ223	1/4W 22K [M]
R626	ERDS2TJ154	1/4W 150K [M]
R627	ERDS2TJ124T	1/4W 120K [M]
R628	ERDS2TJ184T	1/4W 180K [M]
R629	ERDS2TJ104	1/4W 100K [M]
R630	ERDS2TJ473	1/4W 47K [M]
R631	ERDS2TJ224T	1/4W 220K [M]
R637	ERDS2TJ154	1/4W 150K [M]
R638	ERDS2TJ684	1/4W 680K [M]
R639-646⚠	ERDS1FVJ100T	1/2W 10 [M]
R647, 648	ERQ16NKWR15E	1/6W 0.15 [M]
R655-658	ERDS2TJ183T	1/4W 18K [M]
R701, 702	ERDS2TJ273	1/4W 27K [M]
R703, 704	ERDS2TJ101	1/4W 100 [M]
R707⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R708	ERDS2TJ472	1/4W 4.7K [M]
R712	ERDS2TJ152	1/4W 1.5K [M]
R713, 714	ERDS2TJ332	1/4W 3.3K [M]
R715	ERDS2TJ183T	1/4W 18K [M]
R717	ERDS2TJ473	1/4W 47K [M]
R721⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R722⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R723	ERDS2TJ562	1/4W 5.6K [M]
R724	ERDS2TJ152	1/4W 1.5K [M]
R725, 726	ERDS2TJ100	1/4W 10 [M]
R727	ERDS2TJ152	1/4W 1.5K [M]
R729	ERDS2TJ221	1/4W 220 [M]
R735⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R736	ERDS2TJ102	1/4W 1K [M]
R737	ERDS2TJ221	1/4W 220 [M]
R738	ERDS2TJ392T	1/4W 3.9K [M]
R739	ERDS2TJ473	1/4W 47K [M]
R748	ERDS2TJ102	1/4W 1K [M]
R749	ERDS2TJ271	1/4W 270 [M]
R755⚠	ERDS1FVJ8R2T	1/2W 8.2 [M]
R756⚠	ERDS1FJ4R7	1/2W 4.7 [M]
R757-759	ERDS2TJ103	1/4W 10K [M]
R761, 762	ERDS2TJ822	1/4W 8.2K [M]
R763	ERDS2TJ472	1/4W 4.7K [M]
R764	ERDS2TJ331	1/4W 330 [M]
R765⚠	ERDS1FVJ561T	1/2W 560 [M]
R766	ERDS2TJ102	1/4W 1K [M]
R767⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R768	ERDS2TJ101	1/4W 100 [M]
R791, 792⚠	RSFMB30KT-L	PROTECTOR [M]
R801, 802	ERDS2TJ393	1/4W 39K [M]
R808	ERDS2TJ104	1/4W 100K [M]

Ref. No.	Part No.	Values & Remarks
R819	ERDS2TJ393	1/4W 39K [M]
R822	ERDS2TJ102	1/4W 1K [M]
R823	ERDS2TJ105T	1/4W 1M [M]
R825-827	ERDS2TJ332	1/4W 3.3K [M]
R835, 836	ERDS2TJ222	1/4W 2.2K [M]
R837, 838	ERDS2TJ182	1/4W 1.8K [M]
R842	ERDS2TJ104	1/4W 100K [M]
R843, 844	ERDS2TJ222	1/4W 2.2K [M]
R845	ERDS2TJ104	1/4W 100K [M]
R846	ERDS2TJ102	1/4W 1K [M]
R847, 848	ERDS2TJ472	1/4W 4.7K [M]
R849	ERDS2TJ102	1/4W 1K [M]
R850	ERDS2TJ222	1/4W 2.2K [M]
R851	ERDS2TJ473	1/4W 47K [M]
R852	ERDS2TJ393	1/4W 39K [M]
R853	ERDS2TJ473	1/4W 47K [M]
R854	ERDS2TJ393	1/4W 39K [M]
R855	ERDS2TJ104	1/4W 100K [M]
R856, 857	ERDS2TJ123	1/4W 12K [M]
R859, 860	ERDS2EJ121	1/4W 120 [M]
R861	ERDS2TJ105T	1/4W 1M [M]
R862	ERDS2TJ472	1/4W 4.7K [M]
R863, 864	ERDS2TJ105T	1/4W 1M [M]
R865	ERDS2TJ102	1/4W 1K [M]
R866, 867	ERDS2TJ222	1/4W 2.2K [M]
R868-870	ERDS2TJ102	1/4W 1K [M]
R871, 872	ERDS2TJ4R7T	1/4W 4.7 [M]
R873⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R874	ERDS2TJ104	1/4W 100K [M]
R875	ERDS2TJ102	1/4W 1K [M]
R891	ERDS2TJ331	1/4W 330 [M]
R901	ERDS2TJ821	1/4W 820 [M]
R902	ERDS2TJ102	1/4W 1K [M]
R903	ERDS2TJ122	1/4W 1.2K [M]
R904	ERDS2TJ152	1/4W 1.5K [M]
R905	ERDS2TJ182	1/4W 1.8K [M]
R906	ERDS2TJ222	1/4W 2.2K [M]
R907	ERDS2TJ272T	1/4W 2.7K [M]
R908	ERDS2TJ472	1/4W 4.7K [M]
R909	ERDS2TJ682T	1/4W 6.8K [M]
R910	ERDS2TJ123	1/4W 12K [M]
R911	ERDS2TJ223	1/4W 22K [M]
R912	ERDS2TJ821	1/4W 820 [M]
R919-923	ERDS2TJ103	1/4W 10K [M]
R924-927	ERDS2TJ102	1/4W 1K [M]
R929	ERDS2TJ102	1/4W 1K [M]
R930	ERDS2TJ101	1/4W 100 [M]
R931-936	ERDS2TJ102	1/4W 1K [M]
R937	ERDS2TJ562	1/4W 5.6K [M]
R938	ERDS2TJ102	1/4W 1K [M]
R939	ERDS2TJ152	1/4W 1.5K [M]
R940, 941	ERDS2TJ102	1/4W 1K [M]

Ref. No.	Part No.	Values & Remarks
R942	ERDS2TJ101	1/4W 100 [M]
R943	ERDS2TJ102	1/4W 1K [M]
R946	ERDS2TJ102	1/4W 1K [M]
R947, 948	ERDS2TJ104	1/4W 100K [M]
R949	ERDS2TJ472	1/4W 4.7K [M]
R950	ERDS2TJ101	1/4W 100 [M]
R951	ERDS2TJ334	1/4W 330K [M]
R952	ERDS2TJ106T	1/4W 10M [M]
R953	ERDS2TJ101	1/4W 100 [M]
R954	ERDS2TJ104	1/4W 100K [M]
R955	ERDS2TJ824	1/4W 820K [M]
R956-958	ERDS2TJ102	1/4W 1K [M]
R959	ERDS2TJ471	1/4W 470 [M]
R960	ERDS2TJ152	1/4W 1.5K [M]
R961, 962	ERDS2TJ223	1/4W 22K [M]
R963, 964	ERDS2TJ103	1/4W 10K [M]
R965	ERDS2TJ472	1/4W 4.7K [M]
R966	ERDS2TJ103	1/4W 10K [M]
R967	ERDS2TJ473	1/4W 47K [M]
R968	ERDS2TJ103	1/4W 10K [M]
R969, 970	ERDS2TJ472	1/4W 4.7K [M]
R971	ERDS2TJ473	1/4W 47K [M]
R972	ERDS2TJ223	1/4W 22K [M]
R974	ERDS2TJ101	1/4W 100 [M]
R975	ERDS2TJ181T	1/4W 180 [M]
R977-981	ERDS2TJ104	1/4W 100K [M]
R984, 985	ERDS2TJ473	1/4W 47K [M]
R986-988	ERDS2TJ102	1/4W 1K [M]
R989, 990	ERDS2TJ393	1/4W 39K [M]
R991	ERDS2TJ473	1/4W 47K [M]
R993, 994	ERDS2TJ104	1/4W 100K [M]
R996, 997	ERDS2TJ151	1/4W 150 [M]
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U [M]
C103	ECBT1C103NS5	16V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]
C106	ECBT1C103NS5	16V 0.01U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]
C112	ECBT1C103NS5	16V 0.01U [M]
C113	ECBT1H102KB5	50V 1000P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]
C115	ECEA1EKA4R7B	25V 4.7U [M]
C116	ECBT1C822KS5	16V 8200P [M]
C117	ECQB1H102JF3	50V 1000P [M]
C118, 119	ECFR1C103KR	16V 0.01U [M]
C120, 121	ECEA1HKA010B	50V 1U [M]
C122	ECEA1HKA2R2B	50V 2.2U [M]

Ref. No.	Part No.	Values & Remarks
C123	ECEA1HKA010B	50V 1U [M]
C124	ECBT1H102KB5	50V 1000P [M]
C125	ECBT1H150JC5	50V 15P [M]
C126	ECBT1H473ZF5	50V 0.047U [M]
C127	ECEA1CKA220B	16V 22U [M]
C128	ECBT1H102KB5	50V 1000P [M]
C129, 130	ECEA0JKA101B	6.3V 100U [M]
C132	ECBT1H102KB5	50V 1000P [M]
C133, 134	ECBT1H270JU5	50V 27P [M]
C135, 136	ECBT1C103KS5	16V 0.01U [M]
C137, 138	ECBT1H561KB5	50V 560P [M]
C139, 140	ECBT1C562KR5	16V 5600P [M]
C141-144	ECEA1HKA010B	50V 1U [M]
C145	ECBT1H220JC5	50V 22P [M]
C148	ECBT1C103NS5	16V 0.01U [M]
C149	ECBT1H104ZF5	50V 0.1U [M]
C171, 172	ECBT1H102KB5	50V 1000P [M]
C173	ECEA1CKA220B	16V 22U [M]
C174	RCE1CKA100BG	16V 10U [M]
C196	ECBT1H102KB5	50V 1000P [M]
C201, 202	ECBT1H180J5	50V 18P [M]
C219-226	ECBT1H101KB5	50V 100P [M]
C229-234	ECBT1H101KB5	50V 100P [M]
C235, 236	ECBT1H104ZF5	50V 0.1U [M]
C301	ECBT1H102KB5	50V 1000P [M]
C302, 303	ECBT1H561KB5	50V 560P [M]
C309	ECEA1HKAR22B	50V 0.22U [M]
C310	ECFR1C393KR	16V 0.039U [M]
C312	ECFR1C823MR	16V 0.082U [M]
C313	ECFR1C103KR	16V 0.01U [M]
C315	ECFR1C223KR	16V 0.022U [M]
C316	ECBT1C332KR5	16V 3300P [M]
C318	ECBT1C682KR5	16V 6800P [M]
C319	ECBT1H102KB5	50V 1000P [M]
C320	ECBA1H681KB5	50V 680P [M]
C321	ECBT1C332KR5	16V 3300P [M]
C322	ECQV1H333JM3	50V 0.033U [M]
C324	ECFR1C683KR	16V 0.068U [M]
C325	ECQV1H154JM3	50V 0.15U [M]
C326	ECBT1H102KB5	50V 1000P [M]
C327	ECBT1H471KB5	50V 470P [M]
C328	RCE1CKA470BG	16V 47U [M]
C329	ECEA1HKA2R2B	50V 2.2U [M]
C330	ECBA1H681KB5	50V 680P [M]
C331	ECBT1H104ZF5	50V 0.1U [M]
C332-334	ECBT1H470J5	50V 47P [M]
C336	ECBT1H104ZF5	50V 0.1U [M]
C337	RCE1CKA470BG	16V 47U [M]
C338	ECBT1H471KB5	50V 470P [M]
C339	ECBT1H102KB5	50V 1000P [M]
C340	ECQV1H154JM3	50V 0.15U [M]
C341	ECFR1C683KR	16V 0.068U [M]

Ref. No.	Part No.	Values & Remarks
C342	ECQV1H333JM3	50V 0.033U [M]
C343	ECEA1HKA2R2B	50V 2.2U [M]
C344	ECBT1C332KR5	16V 3300P [M]
C346	ECBT1H102KB5	50V 1000P [M]
C347	ECBT1C682KR5	16V 6800P [M]
C348	RCE1CKA100BG	16V 10U [M]
C349	ECBT1C332KR5	16V 3300P [M]
C350	ECFR1C223KR	16V 0.022U [M]
C352	ECFR1C103KR	16V 0.01U [M]
C353	ECFR1C823MR	16V 0.082U [M]
C354	ECEA1CN100SB	16V 10U [M]
C355	ECFR1C393KR	16V 0.039U [M]
C356	ECEA1HKAR22B	50V 0.22U [M]
C357, 358	ECQV1H683JM3	50V 0.068U [M]
C359	RCE1HKA3R3BG	50V 3.3U [M]
C360	RCE1HKA4R7BG	50V 4.7U [M]
C361, 362	ECBT1C222KR5	16V 2200P [M]
C364	ECBT1C152KR5	16V 1500P [M]
C365	ECQV1H154JM3	50V 0.15U [M]
C371	ECEA0JKA101B	6.3V 100U [M]
C372	ECBT1H104ZF5	50V 0.1U [M]
C385, 386	ECEA1HKAR22B	50V 0.22U [M]
C395, 396	ECBT1H473ZF5	50V 0.047U [M]
C401	ECBT1H102KB5	50V 1000P [M]
C403	ECBT1H102KB5	50V 1000P [M]
C404	RCE1HKA3R3BG	50V 3.3U [M]
C405	ECBT1H471KB5	50V 470P [M]
C406	ECEA1EU4R7	25V 4.7U [M]
C407	ECBT1E103ZF	25V 0.01U [M]
C408	ECBT1C103MS5	16V 0.01U [M]
C409	ECEA1HKA010B	50V 1U [M]
C410	ECEA1CKS100L	16V 10U [M]
C411	ECBT1H101KB5	50V 100P [M]
C412	ECBT1H102KB5	50V 1000P [M]
C413	ECEA1HKA010B	50V 1U [M]
C414	ECEA1AKA221B	10V 220U [M]
C415	ECEA1HKA010B	50V 1U [M]
C416	RCE1CKA100BG	16V 10U [M]
C417	ECBT1C472KR5	16V 4700P [M]
C418	ECBT1H221KB5	50V 220P [M]
C419	RCE1CKA100BG	16V 10U [M]
C420	ECBT1H104ZF5	50V 0.1U [M]
C421	RCE1AKA101BG	10V 100U [M]
C422	ECBT1C103KS5	16V 0.01U [M]
C424	ECBT1C103KS5	16V 0.01U [M]
C425	ECBT1C332MR5	16V 3300P [M]
C426	ECEA1HKA010B	50V 1U [M]
C427	ECBT0J223MS5	6.3V 0.022U [M]
C428	ECEA1HKA010B	50V 1U [M]
C429	ECBT1C472MR5	16V 4700P [M]
C430	ECBT1C103KS5	16V 0.01U [M]
C431	ECEA1HKNR47B	50V 0.47U [M]

Ref. No.	Part No.	Values & Remarks
C432	ECBT0J223MS5	6.3V 0.022U [M]
C433	RCE1CKA470BG	16V 47U [M]
C434	RCE1CKA100BG	16V 10U [M]
C441	ECBT1E103ZF	25V 0.01U [M]
C501-506	ECBT1H101KB5	50V 100P [M]
C507, 508	RCE1CKA100BG	16V 10U [M]
C509-512	ECBT1E103ZF	25V 0.01U [M]
C513, 514	ECBT1C103KS5	16V 0.01U [M]
C551	ECEA1HKA2R2B	50V 2.2U [M]
C552	ECBT1E103ZF	25V 0.01U [M]
C554	ECA1AM221B	10V 220U [M]
C555, 556	ECEA1CKN100B	16V 10U [M]
C557, 558	ECFR1C393KR	16V 0.039U [M]
C559	ECBT1E103ZF	25V 0.01U [M]
C602-605	RCE1CKA100BG	16V 10U [M]
C607-610	ECBT1H471KB5	50V 470P [M]
C611-614	ECBT1H150JC5	50V 15P [M]
C615	ECEA2AU010	100V 1U [M]
C616	ECA1JM330B	63V 33U [M]
C617	ECEA1HN2R2	50V 2.2U [M]
C618	ECA1HM101B	50V 100U [M]
C620, 621	ECQV1H473JM3	50V 0.047U [M]
C624, 625	ECQV1H473JM3	50V 0.047U [M]
C628, 629	RCE1CKA100BG	16V 10U [M]
C701⚠	ECA1VM472E	35V 4700U [M]
C702⚠	ECA1VM562E	35V 5600U [M]
C703, 704⚠	ECA1VM332E	35V 3300U [M]
C705	RCE1CKA100BG	16V 10U [M]
C706	RCE1VKA100BG	35V 10U [M]
C707	ECBT1E103ZF	25V 0.01U [M]
C708	RCE1CKA100BG	16V 10U [M]
C709	ECBT1H104ZF5	50V 0.1U [M]
C710	ECBT1E103ZF	25V 0.01U [M]
C711	RCE1EM471BV	25V 470U [M]
C714	ECBT1H102KB5	50V 1000P [M]
C715⚠	ECA1EM472E	25V 4700U [M]
C717	ECEA1CKA330B	16V 33U [M]
C718	RCE1AKA101BG	10V 100U [M]
C719, 720	ECBT1E103ZF	25V 0.01U [M]
C721	RCE1AKA101BG	10V 100U [M]
C723	ECBT1E103ZF	25V 0.01U [M]
C725	RCE1CKA100BG	16V 10U [M]
C726	ECBT1E103ZF	25V 0.01U [M]
C731	ECBT1H102KB5	50V 1000P [M]
C732	ECBT1E223ZF	25V 0.022U [M]
C734	RCE1CKA100BG	16V 10U [M]
C736⚠	ECA1EM101B	25V 100U [M]
C737, 738⚠	ECA1HM101B	50V 100U [M]
C739⚠	ECA1JM101B	63V 100U [M]
C740	RCE1CKA100BG	16V 10U [M]
C741	ECBT1H104ZF5	50V 0.1U [M]
C801	ECQV1H154JM3	50V 0.15U [M]

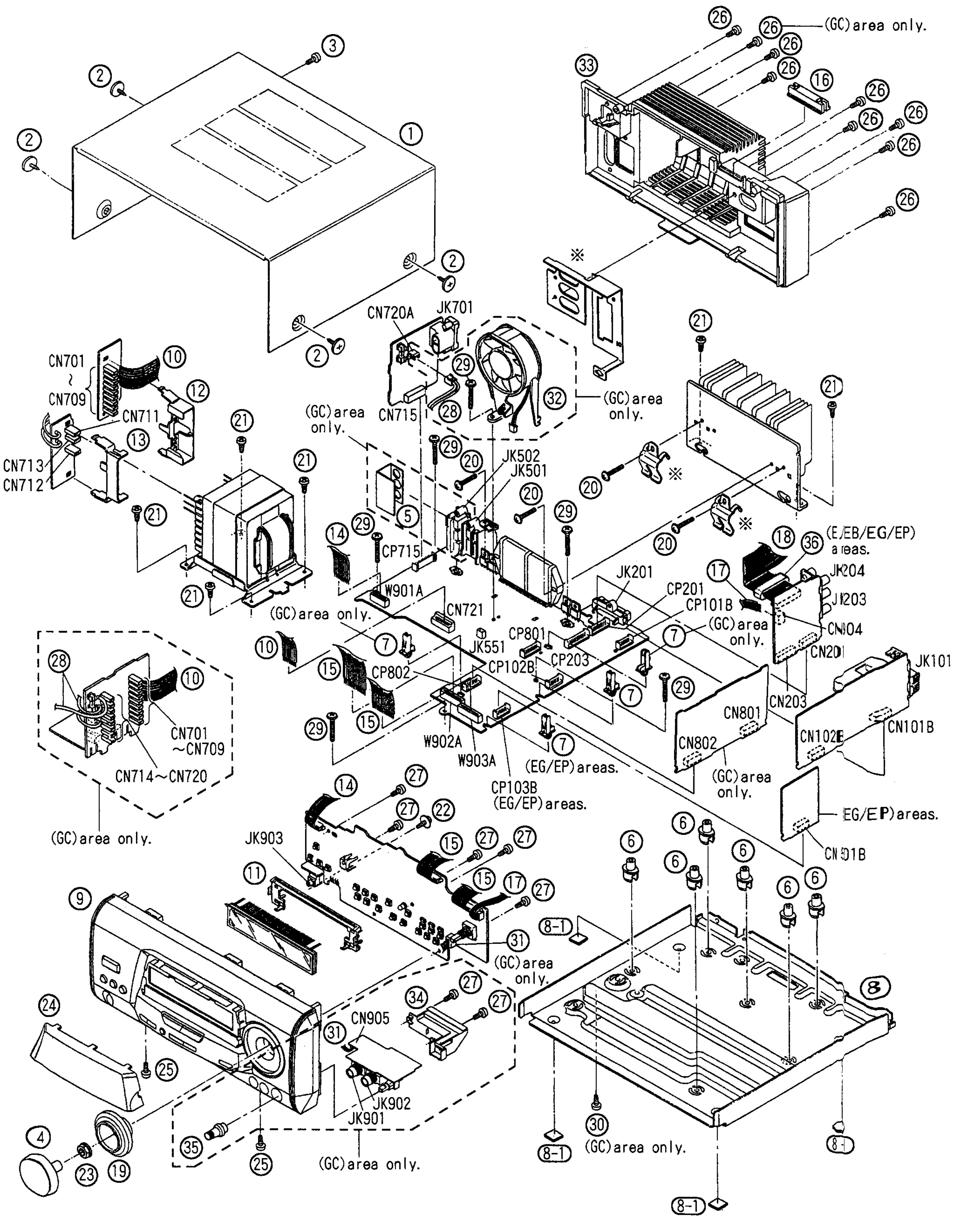
Ref. No.	Part No.	Values & Remarks
C802	RCE1HKA3R3BG	50V 3.3U [M]
C803	ECQV1H154JM3	50V 0.15U [M]
C804	RCE1HKA4R7BG	50V 4.7U [M]
C805	RCE1HKAR47BG	50V 0.47U [M]
C806	RCE1HKA4R7BG	50V 4.7U [M]
C807	RCE1HKAR47BG	50V 0.47U [M]
C808	RCE1CKA100BG	16V 10U [M]
C809	ECEA1HKA010B	50V 1U [M]
C811, 812	ECEA1CKA330B	16V 33U [M]
C813	ECA1CM221B	16V 220U [M]
C814-817	RCE1CKA100BG	16V 10U [M]
C818	ECEA1HKA2R2B	50V 2.2U [M]
C820	ECEA1HKAR33B	50V 0.33U [M]
C821	ECA1CM221B	16V 220U [M]
C824	ECA1CM221B	16V 220U [M]
C825, 826	ECBT1H101KB5	50V 100P [M]
C827	ECBT1H330J5	50V 33P [M]
C828	ECFR1C823MR	16V 0.082U [M]
C829	ECFR1E332KR	25V 3300P [M]
C830	ECFR1C823MR	16V 0.082U [M]
C831	RCE1HKAR47BG	50V 0.47U [M]
C832	ECQV1H473JM3	50V 0.047U [M]
C833	ECA1CM221B	16V 220U [M]
C834	RCE1HKAR47BG	50V 0.47U [M]
C835	RCE1CKA470BG	16V 47U [M]
C836	ECEA1HKA010B	50V 1U [M]
C837	ECBT1H104ZF5	50V 0.1U [M]
C840, 841	RCE1CKA100BG	16V 10U [M]
C842	RCE1HKAR47BG	50V 0.47U [M]
C843	RCE1HKA4R7BG	50V 4.7U [M]
C844	RCE1HKAR47BG	50V 0.47U [M]
C845	RCE1HKA4R7BG	50V 4.7U [M]
C846	ECQV1H154JM3	50V 0.15U [M]
C847	RCE1HKA3R3BG	50V 3.3U [M]
C848	ECQV1H154JM3	50V 0.15U [M]
C851	RCE1CKA470BG	16V 47U [M]
C852	ECBA1H681KB5	50V 680P [M]
C861, 862	RCE1CKA100BG	16V 10U [M]
C863, 864	ECEA1CKA220B	16V 22U [M]
C865, 866	RCE1HKA3R3BG	50V 3.3U [M]
C867-869	ECEA1CKA330B	16V 33U [M]
C870	RCE1CKA100BG	16V 10U [M]
C871, 872	ECBT1H470J5	50V 47P [M]
C873, 874	ECEA0JKA470B	6.3V 47U [M]
C875, 876	RCE1CKA100BG	16V 10U [M]
C877	ECEA0JKA101B	6.3V 100U [M]
C878	ECBT1E103ZF	25V 0.01U [M]
C880	ECEA1CKA101B	16V 100U [M]
C882	ECEA1CKA101B	16V 100U [M]
C887	ECBT1H102KB5	50V 1000P [M]
C888, 889	ECBT1H221KB5	50V 220P [M]
C901	ECBT1H104ZF5	50V 0.1U [M]
C902	ECA0JM102B	6.3V 1000U [M]
C903	ECBT1E103ZF	25V 0.01U [M]
C905-908	ECBT1H471KB5	50V 470P [M]
C909	ECBT1H102KB5	50V 1000P [M]
C910	ECBT1H150JC5	50V 15P [M]
C911	ECBT1H180JC5	50V 18P [M]
C912	ECBT1H104ZF5	50V 0.1U [M]
C913	RCE1CKA100BG	16V 10U [M]
C914	ECEA1HKA2R2B	50V 2.2U [M]
C915	ECBT1E103ZF	25V 0.01U [M]
C916	ECA0JKF101B	6.3V 100U [M]
C917	ECBT1E103ZF	25V 0.01U [M]
C918	ECEA0JKA221B	6.3V 220U [M]
C919, 920	ECEA1HKS2R2B	50V 2.2U [M]
C921	ECBT1H102KB5	50V 1000P [M]
C922	ECEA1VKA330B	35V 33U [M]
C1101, 1102	ECBT1H473ZF5	50V 0.047U [M]
C1103-1106	ECBT1H102KB5	50V 1000P [M]
C1107, 1108	ECBT1H473ZF5	50V 0.047U [M]
C1109-1111	ECBT1H102KB5	50V 1000P [M]

■ Replacement Parts List (Cabinet, Packing and Accessory)

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKM0202E-K	CABINET	[M] (E/EB/EG/EP)
1	RKM0202F-K	CABINET	[M] (GC)
2	RHD30007-K1	SCREW	[M]
3	XTBS3+10JFZ1	SCREW	[M]
4	RGW0183-K	KNOB, VOLUME	[M]
5	RMV0136	HOLDER	[M] (GC)
6	RKQ0089-2	P. C. B. SPACER	[M]
7	RMN0203	P. C. B. HOLDER 1	[M]
8	RFKJAEH50E-K	CHASSIS ASS'Y	[M] (E/EB/EG/EP)
8	RFKJAEH50GCK	CHASSIS ASS'Y	[M] (GC)
8-1	SHG1645	RUBBER	[M]
9	RFKGAEH50E-K	FRONT PANEL ASS'Y	[M] (E/EB)
9	RFKGAEH50EGK	FRONT PANEL ASS'Y	[M] (EG/EP)
9	RFKGAEH50GCK	FRONT PANEL ASS'Y	[M] (GC)
10	RWJ1809150KQ	FLAT CABLE (W721/9P)	[M]
11	RMN0426	FL HOLDER	[M]
12	RMN0429	P. C. B. HOLDER 2	[M]
13	RMN0437	P. C. B. HOLDER 3	[M]
14	RWJ7610260QQ	FLAT CABLE (W901/10P)	[M]
15	RWJ7615210QQ	FLAT CABLE (W902·W903/15P)	[M]
16	RMN0427	CABLE HOLDER	[M]
17	RWJ6805330QR	FLAT CABLE (W904/5P)	[M]
18	REX0852	WIRE ASS'Y (W202)	[M]
19	RGK0894-N	ORNAMENT	[M]
20	XTW3+15T	SCREW	[M]
21	XTB3+8JFZ	SCREW	[M]
22	RHD26016	SCREW	[M]
23	RHN90001	NUT	[M]
24	RKW0506B-Q	FL PANEL	[M]
25	XTBS3+8JFZ1	SCREW	[M]
26	XTB3+10JFZ	SCREW	[M]
27	XTBS26+8J	SCREW	[M]
28	RFKEAEH60GCK	WIRE ASS'Y	[M] (GC)
29	XTB3+20JFZ	SCREW	[M]
30	XTB3+8FFZ	SCREW	[M] (GC)
31	REZ0971	FLAT CABLE (W905/5P)	[M] (GC)
32	REM0057	FAN UNIT	[M] (GC)
33	RKF0513B-K	REAR PANEL	[M] (E/EG/EP)
33	RFKHAEH50EBK	REAR PANEL ASS'Y	[M] (EB)
33	RFKHAEH50GCK	REAR PANEL ASS'Y	[M] (GC)
34	RMN0425	JACK HOLDER	[M] (GC)
35	RGW0235-K	KNOB, MIC VOLUME	[M] (GC)
36	RLBT4001-D	FERRITE CORE (5P)	[M] (E/EB/EG EP)
		PACKING MATERIALS	
P1	RPN1036-1	PAD (SA-EH50)	[M]
P1	RPN1038	PAD (SH/SL-EH50)	[M]
P1	RPN1037	PAD (RS-EH60)	[M]
P2	RPQ0779	PAD (SA-EH50)	[M] (E/EB/EG)
P3	RPQ0734	PAD (SA-EH50)	[M] (E/EB/EG)
P4	RPQ0777-1	PAD (SH/SL-EH50)	[M] (E)
P5	RPQ0734	PAD (RS-EH60)	[M] (E)
P6	RPQ0776-1	PAD (RS-EH60)	[M] (E)
P7	RPQ0769	PAD (SYSTEM)	[M] (EP/GC)
P8	RPQ0770	PAD (SYSTEM)	[M] (EP/GC)
P9	RPF0139	PROTECTION COVER	[M]
P10	RPG3521	PACKING CASE (SA-EH50)	[M] (E/EB/EG)
P10	RPG3517	PACKING CASE (SA-EH50)	[M] (EP/GC)
P10	RPG3451	PACKING CASE (SH-EH50)	[M] (E)
P10	RPG3513	PACKING CASE (SH-EH50)	[M] (EP)
P10	RPG3514	PACKING CASE (SH-EH50)	[M] (GC)
P10	RPG3348	PACKING CASE (SL-EH50)	[M] (E)
P10	RPG3514	PACKING CASE (SL-EH50)	[M] (EP)
P10	RPG3453	PACKING CASE (RS-EH60)	[M] (E)
P10	RPG3515	PACKING CASE (RS-EH60)	[M] (EP)
P11	RPG3449	PACKING CASE (SYSTEM)	[M] (EP)
P11	RPG3340	PACKING CASE (SYSTEM)	[M] (GC)
P12	SPP740	SHEET	[M]
		ACCESSORIES	
A1	RAK-CH426WH	REMOTE CONTROL TRANSMITTER	[M] (E/EB/EG/EP)
A1	RAK-CH220WH	REMOTE CONTROL TRANSMITTER	[M] (GC)
A1-1	RKK0080-K	BATTERY COVER	[M] (E/EB/EG/EP)
A1-1	RKK0057-K	BATTERY COVER	[M] (GC)
A2	REE0499	SPEAKER CORD	[M]
A3⚠	RJA0019-X	AC POWER SUPPLY CORD	[M] (E/EG/EP/GC)
A3⚠	RJA0053-1X	AC POWER SUPPLY CORD	[M] (EB)
A4	RQA0117	WARRANTY CARD	[M] (E/EB/EG)
A5<IA>	RQT3988-E	INSTRUCTION MANUAL	[M] (E)
A5<IB>	RQT3868-B	INSTRUCTION MANUAL	[M] (EB/EP)
A5<IC>	RQT3870-D	INSTRUCTION MANUAL	[M] (EG)
A5<ID>	RQT3871-H	INSTRUCTION MANUAL	[M] (EG)
A5<IE>	RQT3869-R	INSTRUCTION MANUAL	[M] (EP)
A5<IF>	RQT3873-G	INSTRUCTION MANUAL	[M] (GC)
A6	RSA0007	FM INDOOR ANTENNA	[M] (E/EB/EG/EP)
A6	RSA0006	FM INDOOR ANTENNA	[M] (GC)
A7	RSA0012	AM LOOP ANTENNA	[M]
A7-1	RMN0244	ANTENNA HOLDER	[M]
A8	RQCB0169	SERVICENTER LIST	[M] (E/EB/EG/GC)
A9	RQCA0536	QUICK SET UP GUIDE	[M] (EB)
A10	SJP9009	ANTENNA PLUG ADAPTER	[M] (EB)
A11⚠	SJP5213-1	AC PLUG ADAPTER	[M] (GC)
		JIG/TOOL (S)	
SA1	RFKX0002	GREASE	[M]

NOTE: The "<IA>, <IB>, <IC>, <ID>, <IE>, <IF>" marks in Remarks indicate language of instruction manual.
<IA>: Spanish, Swedish, French
<IB>: English
<IC>: German, Italian, French
<ID>: Dutch, Danish
<IE>: Russin, Polish, Czeco
<IF>: English, China, Arabic

■ Cabinet Parts Location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JK701
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CN709
CN711
CN713
CN712
CN715
(GC)area only.
JK502
JK501
CP715
W901A
CN721
JK551
CP801
CP203
CP102B
CP802
W902A
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~CN709
CN714~CN720
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CN905
JK902
JK901
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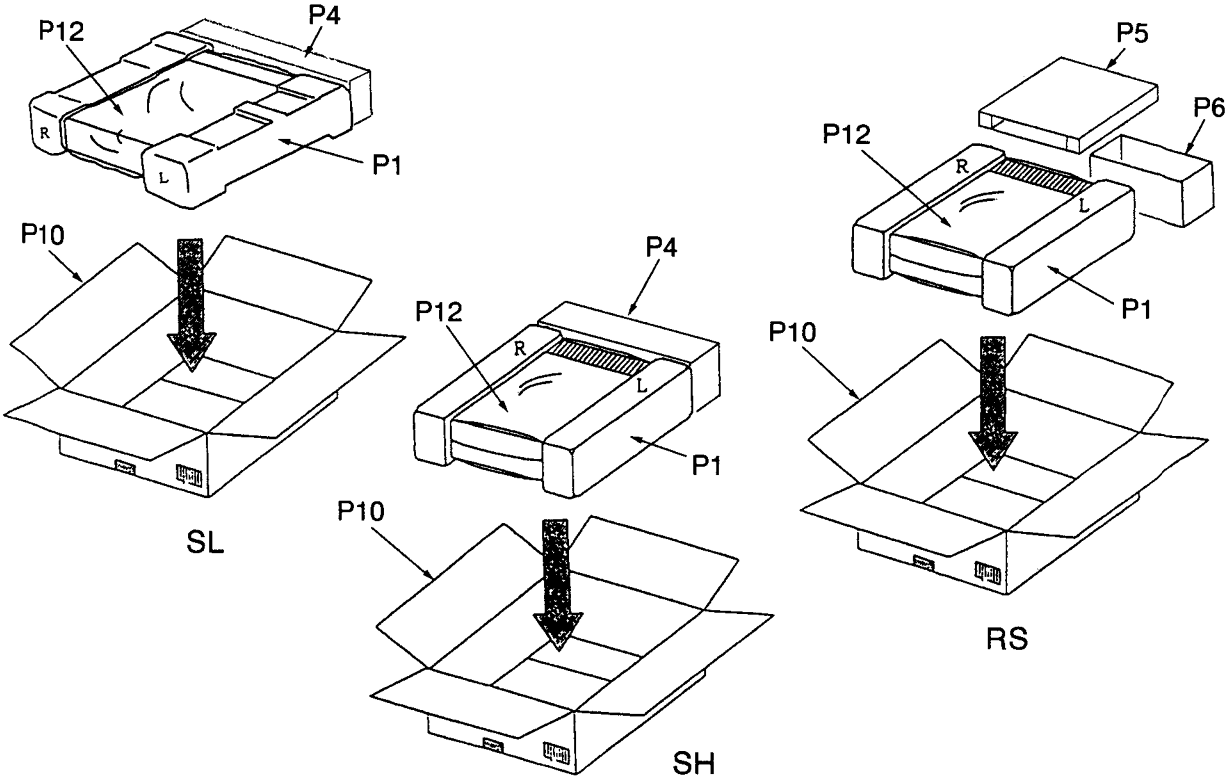
We do not supply those items of parts marked ※.

■ Packaging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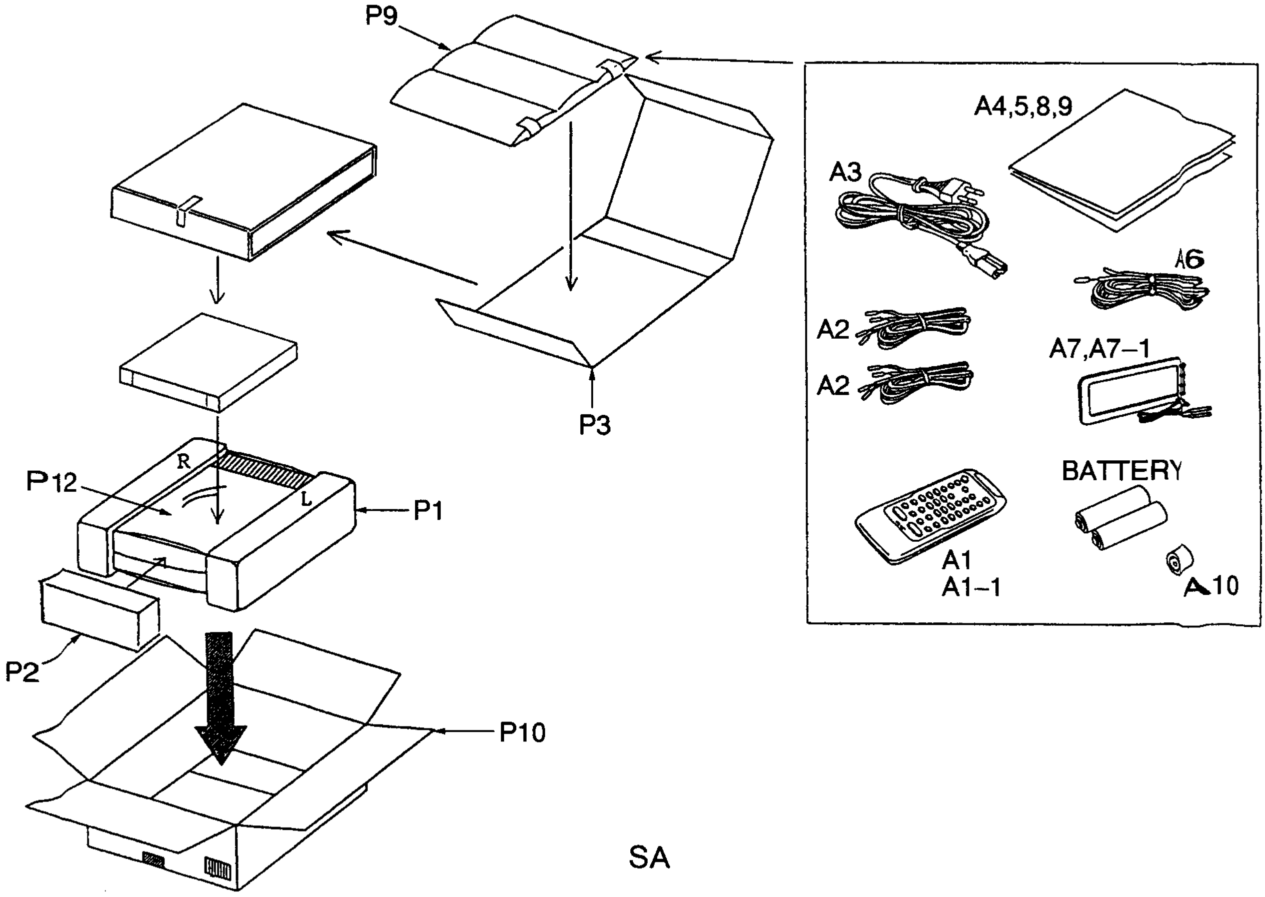
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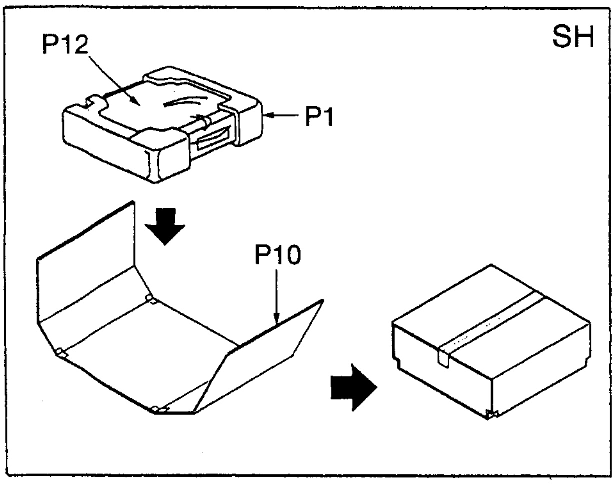
SA

For (E),(EB),(EG) Area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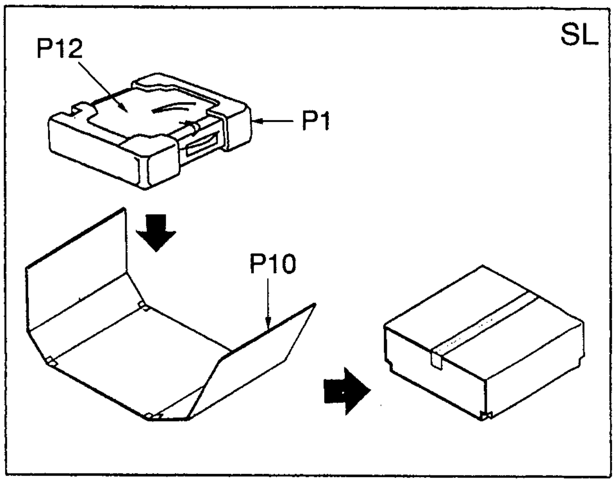
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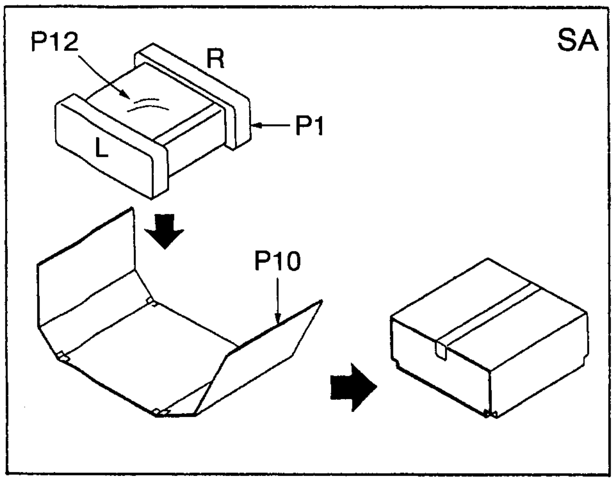
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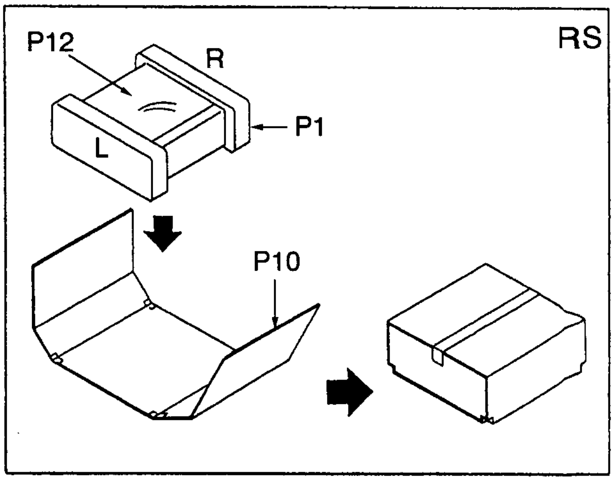
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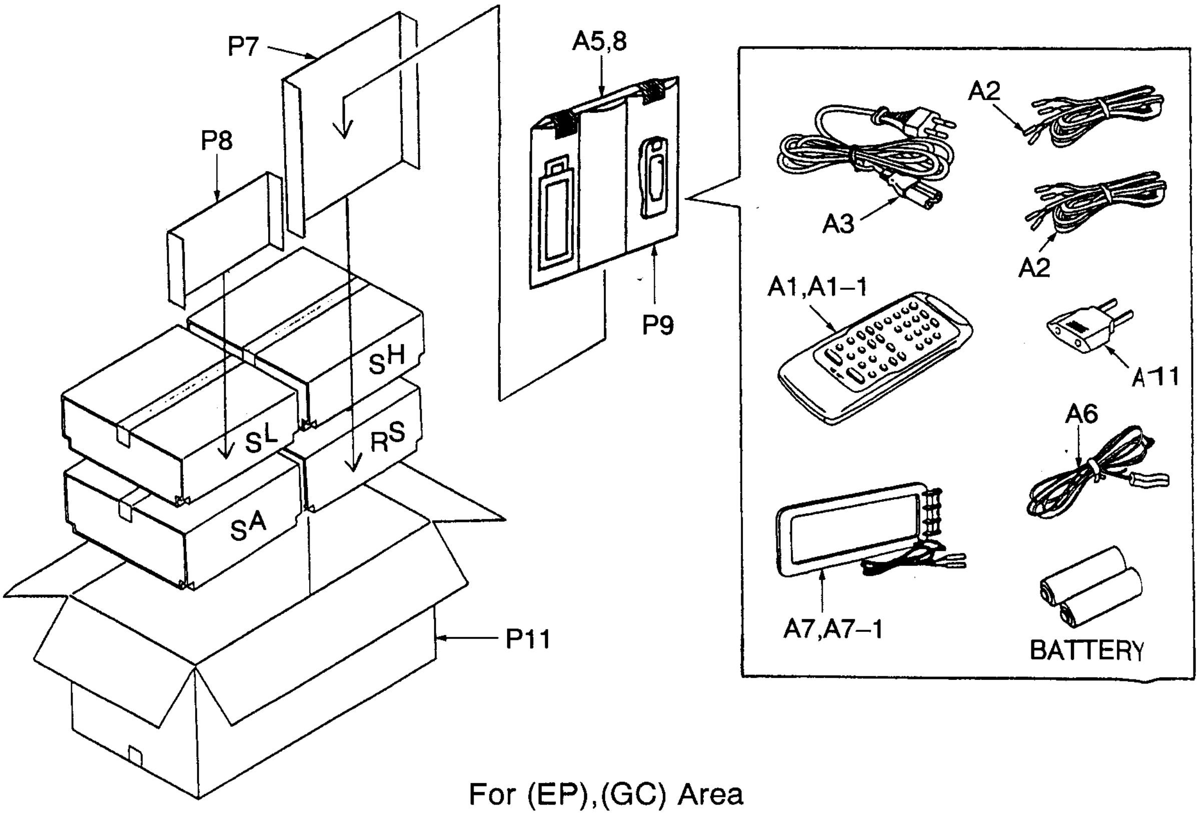
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BATTERY

For (EP),(GC) Area